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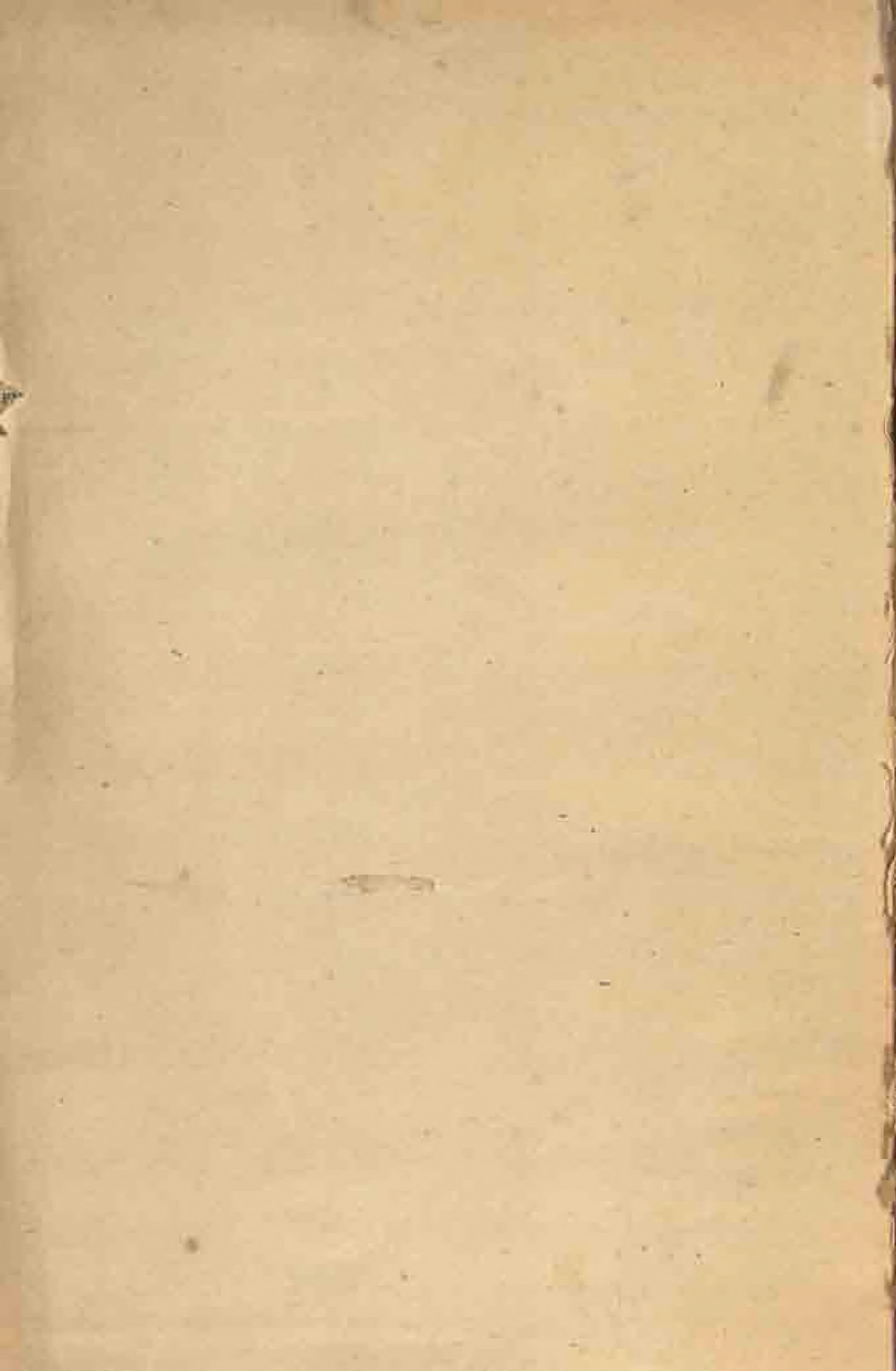
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THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

THE JOURNAL
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RULES

OF THE

Society for the Promotion of Hellenic Studies.

1. THE objects of this Society shall be as follows:—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains; and with this view to invite travellers to communicate to the Society notes or sketches of archaeological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archaeological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, 40 Hon. Members, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read; the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President shall be elected by the Members of the Society at the Annual Meeting for a period of five years, and shall not be immediately eligible for re-election.

17. The Vice-Presidents shall be elected by the Members of the Society at the Annual Meeting for a period of one year, after which they shall be eligible for re-election.

18. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

19. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

20. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

21. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

22. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

23. Upon any vacancy in the Presidency occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

24. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

25. The names of all candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of candidates so proposed; no such election to be valid unless the candidate receives the votes of the majority of those present.

26. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year; this annual subscription may be compounded for by a single payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1905, shall pay on election an entrance fee of two guineas.

27. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

28. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

29. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1; otherwise they will be held liable for the subscription for the current year.

30. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

31. The Council shall have power to nominate 40 British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

32. The Council may, at their discretion, elect for a period not exceeding five years Student-Associates, who shall be admitted to certain privileges of the Society.

33. The names of Candidates wishing to become Student-Associates shall be submitted to the Council in the manner prescribed for the Election of Members. Every Candidate shall also satisfy the Council by means of a certificate from his teacher, who must be a person occupying a recognised position in an educational body and be a Member of the Society, that he is a *bona fide* Student in subjects germane to the purposes of the Society.

34. The Annual Subscription of a Student-Associate shall be one guinea, payable and due on the 1st of January in each year. In case of non-payment the procedure prescribed for the case of a defaulting Ordinary Member shall be followed.

35. Student-Associates shall receive the Society's ordinary publications, and shall be entitled to attend the General and Ordinary Meetings, and to read in the Library. They shall not be entitled to borrow books from the Library, or to make use of the Loan Collection of Lantern Slides, or to vote at the Society's Meetings.

36. A Student-Associate may at any time pay the Member's entrance fee of two guineas, and shall forthwith become an Ordinary Member.

37. Ladies shall be eligible as Ordinary Members or Student-Associates of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members or Student-Associates.

38. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

RULES FOR THE USE OF THE LIBRARY

AT 19 BLOOMSBURY SQUARE, W.C.

I. THAT the Hellenic Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Hon. Librarian and Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Hon. Librarian, Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian, and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except on Christmas Day, Good Friday, and on Bank Holidays, the Library be accessible to Members on all week days from 10.30 A.M. to 5.30 P.M. (Saturdays, 10 A.M. to 1 P.M.), when either the Librarian, or in his absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation for August and the first week of September.

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:—

- (1) That the number of volumes lent at any one time to each Member shall not exceed three; but Members belonging both to this Society and to the Roman Society may borrow *six* volumes at one time.
- (2) That the time during which such book or books may be kept shall not exceed one month.
- (3) That no books, except under special circumstances, be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:—

- (1) That all requests for the loan of books be addressed to the Librarian.
- (2) That the Librarian shall record all such requests, and lend out the books in the order of application.
- (3) That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.

- (4) Should a book not be returned within the period specified, the Librarian may reclaim it.
- (5) All expenses of carriage to and fro shall be borne by the borrower.
- (6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out under any circumstances :—

- (1) Unbound books.
- (2) Detached plates, plans, photographs, and the like.
- (3) Books considered too valuable for transmission.
- (4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a fine of one shilling for each week after application has been made by the Librarian for its return, and if a book is lost the borrower be bound to replace it.

XII. That the following be the Rules defining the position and privileges of Subscribing Libraries :—

- a. Subscribing Libraries are entitled to receive the publications of the Society on the same conditions as Members.
- b. Subscribing Libraries, or the Librarians, are permitted to purchase photographs, lantern slides, etc., on the same conditions as Members.
- c. Subscribing Libraries and the Librarians are not permitted to hire lantern slides.
- d. A Librarian, if he so desires, may receive notices of meetings and may attend meetings, but is not entitled to vote on questions of private business.
- e. A Librarian is permitted to read in the Society's Library.
- f. A Librarian is not permitted to borrow books, either for his own use, or for the use of a reader in the Library to which he is attached.

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Applications for books and letters relating to the Photographic Collections, and Lantern Slides, should be addressed to the Librarian, at 19 Bloomsbury Square, W.C.

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Annales de la Faculté des Lettres de Bordeaux (*Revue des Études Anciennes—Bulletin Hispanique—Bulletin Italien*). Rédaction des *Annales de la Faculté des Lettres, L'Université, Bordeaux, France.*

Annals of Archaeology and Anthropology (The Institute of Archaeology, 40, *Bedford Street, Liverpool*).

Annual of the British School at Athens.

Archiv für Religionswissenschaft (B. G. Teubner, *Leipzig*).

Berliner Philologische Wochenschrift (O. R. Reisland, *Carlestrasse 20, Leipzig, Germany*).

Bulletin de Correspondance Hellénique (published by the French School at Athens).

Bulletin de l'Institut Archéol. Russe, à Constantinople (M. le Secrétaire, *L'Institut Archéol. Russe, Constantinople*).

Bulletin de la Société Archéologique d'Alexandrie, Alexandria.

Bullettino della Commissione Archeologica Comunale di Roma (Prof. Gatti, Museo Capitolino, *Rome*).

Byzantinische Zeitschrift.

Catalogue général des Antiquités Égyptiennes du Musée du Caire, with the *Annales du Service des Antiquités de l'Égypte, Cairo.*

Classical Philology, University of Chicago, U.S.A.

Ephemeris Archaeologica, Athens.

Glotta (Prof. Dr. Kretschmer, *Floriansgasse, 23, Vienna*).

Hermes (Herr Professor Friedrich Leo, *Friedrich-Weg, Göttingen, Germany*).

Jahrbuch des kais. deutsch. archäol. Instituts, Corneliusstrasse No. 24, Berlin.

Jahreshefte des Österreichischen Archäologischen Institutes, Türkenstrasse 4, Vienna.

Journal of the Anthropological Institute, and Man, 30, Great Russell Street, W.C.

Journal of Philology and Transactions of the Cambridge Philological Society.

- Journal of the Royal Institute of British Architects, 9, *Condott Street, W.*
 Journal International d'Archéologie Numismatique (M. J. N. Svoronos, *Musée National, Athens*).
 Klio (Beiträge zur alten Geschichte), (Prof. E. Kornemann, *Neckarhalde 55, Tübingen*.
 Mélanges de la Faculté Orientale d'Université St. Joseph, *Beirut, Syria*.
 Mélanges d'Histoire et d'Archéologie, *École française, Palazzo Farnese, Rome*.
 Memmos (Prof. Dr. R. Freiherr von Lichtenberg, *Lindenstrasse 5, Berlin Südend, Germany*).
 Memorie dell' Instituto di Bologna, Sezione di Scienze Storico-Filologiche (*R. Accademia di Bologna, Italy*).
 Mitteilungen des kais. deutsch. Archäol. Instituts, *Athens*.
 Mitteilungen des kais. deutsch. Archäol. Instituts, *Rome*.
 Mnemosyne (c/o Mr. E. J. Brill), *Leiden, Holland*.
 Neapolis, Signor Prof. V. Macchioro, *Via Civita 8, Naples*.
 Neue Jahrbücher, Herrn Dr. Rektor Illerg, *Kgl. Gymnasium, Wartin, Saxony*.
 Notizie degli Scavi, R. Accademia del Lincei, *Rome*.
 Numismatic Chronicle, 32, *Albemarle Street*.
 Philologus. Zeitschrift für das klassische Altertum (c/o Dietrich'sche Verlagsbuchhandlung, *Göttingen*).
 Praktika of the Athenian Archaeological Society, *Athens*.
 Proceedings of the Hellenic Philological Syllagos, *Constantinople*.
 Publications of the Imperial Archaeological Commission, *St. Petersburg*.
 Revue Archéologique, c/o M. L. Leroux (Editeur), 23, *Rue Bonaparte, Paris*.
 Revue des Études Grecques, 44, *Rue de Lille, Paris*.
 Revue Epigraphique (Mons. A. J. Reinach, 31, *Rue de Berlin, Paris, VIII*).
 Rheinisches Museum für Philologie (Prof. Dr. A. Brinkmann, *Schumannstrasse 38, Bonn-am-Rhein, Germany*).
 Studien zur Geschichte und Kultur des Altertums (Prof. Dr. E. Drexler, *Kaiser-Strasse 33, Munich, Germany*).
 Wochenschrift für klassische Philologie, *Berlin*.

PROCEEDINGS

SESSION 1913-14

During the past Session the following Papers were read at General Meetings of the Society:—

November 11th, 1913. Mr. Ellis H. Minns: *Two Greek Documents of the First Century B.C. from near Avroman in Western Media* (see below).

February 10th, 1914. Miss Jane Harrison: *Poseidon and the Minotaur* (see below).

May 3th, 1914. Professor Ridgeway: *The Early Iron Age in the Aegean Area* (see below).

June 23rd, 1914. Dr. Walter Leaf: *Presidential Address*.

THE ANNUAL MEETING was held at Burlington House on June 23rd, 1914. At this meeting Dr. Walter Leaf was unanimously elected President of the Society for a term of five years.

Mr. George A. Macmillan, Hon. Secretary, presented the following Annual Report of the Council:—

The Council beg leave to submit the following report on the work of the Society for the Session 1913-1914.

The Presidency of the Society.—With great regret the Council have to announce the resignation of the Society's distinguished President, Sir Arthur Evans.

They wish to record their appreciation of the honour which his high reputation in England and abroad has brought to the chair, the value of the addresses and communications he has made during his tenure of office, and the wise counsel he has never failed to put at the disposal of the Council and officers in critical times.

They note with gratification Sir Arthur's recent election to the Presidency of the Society of Antiquaries.

They now have great pleasure in nominating for the Presidency Dr. Walter Leaf, who has acted as President since Sir Arthur's resignation. Dr. Leaf's services to Hellenic studies, especially in the field of Homeric scholarship, are widely known, and his nomination as President is the more appropriate owing to his long and intimate connexion with the Society, of

whose *Journal* he was for many years an editor, and of whose photographic collections he was a founder.

Changes on the Council, etc.—Sir Frederic Kenyon has accepted the office of Trustee announced in last year's report as vacant owing to the death of the late Lord Avebury. Professor J. G. Frazer has been nominated a Vice-President of the Society, and Messrs. H. I. Bell, Ellis H. Minns, and A. E. Zimmern have been nominated to fill vacancies upon the Council. The Society has been again indebted to Miss C. A. Hutton for help generously given to the Library and offices during the Secretary's absence through illness. Mr. Baker-Penoyre has now returned to his duties. Mr. F. Wise, the Society's clerk, has been promoted to the office of assistant-Librarian.

Among losses by death during the year the Council record with regret the names of Sir William Anson, and of Dr. Barclay J. Head, the eminent numismatist.

Relations with other Bodies.—The alliance between the Hellenic and Roman Societies continues to work well, and the latter Society has recently raised its contribution to £50. The Roman Society is to be congratulated on the successful completion of a representative collection of casts of Romano-British Sculpture, the credit balance accruing from which is being devoted by the Council of the Roman Society to developing the Roman side of the joint library and slide-collection. Further works of value have been added by them to the Joint Library. The third volume of the *Journal of Roman Studies* approaches completion. The main contention of the founders of the Society and of the alliance between the two bodies, that the two Societies together would do more for Classical Studies than could ever have been achieved by the older Society alone, is amply justified.

The Council of the Hellenic Society has recently renewed its annual grants of £100 and £50 respectively to the British School at Athens and the Faculty of Archaeology and Letters of the British School at Rome. To the latter body they have also guaranteed a further £25 towards the cost of the second volume of the *Catalogue of Sculpture in the Municipal Museums of Rome*.

During the Session protracted conferences have taken place between representatives of the Hellenic and Roman Societies and of the Classical Association on the question of supplying slides to members of the teaching profession irrespective of their being members of the bodies named. As the Council had recently reduced the charge for the hire of slides by one half, and have since authorised the borrowing of slides by Schools which subscribe for the *Journal* without entrance fee, they feel that the Society could not go further in the matter without injustice to their members, to which attitude they are supported by the Council of the Roman Society. With a view to watching the interests of the Society they have appointed

a member of their body, Miss C. A. Hutton, to serve on the Classical Materials Board of the Classical Association which is engaged on drawing up a scheme.

A large number of slides of Greek and Roman coins have been presented to the slide-collection by the Council of the Royal Numismatic Society, the members of which Society, by arrangement, are entitled to borrow these slides on the same terms as members of the Hellenic Society.

The Council have recently accepted the Royal Archaeological Institute as their tenant for a room on the upper floor at 19, Bloomsbury Square.

Library, Photographic and Lantern Slide Collections.—A.

Library. The accessions to the Joint Library during the past Session were: Hellenic volumes, 205 (=179 books); completed volumes of periodicals, 84; pamphlets, 66; maps, 25. To these should be added Roman volumes, 64 (=48 books); volumes of periodicals, 17; pamphlets, 12; maps, 11. These together make a total of 484 items, against 489 of last year.

The number of volumes borrowed was 1087, and the number of visits paid to the Library, 1072 as against 938 and 800 respectively for the last Session.

The Council acknowledge with thanks, gifts of books from the following bodies: H.M. Government of India, the Board of Trade, the Trustees of the British Museum, the Director of the Service des Antiquités de l'Égypte, the Austrian Archaeological Institute, the Imperial Museum at Constantinople, the National Institute of Geneva, the Bryn Mawr Publications Committee, the Royal Archaeological Institute, and the University Presses of the following Universities: California, Cambridge, Oxford, Princeton.

The following publishers have presented copies of recently published works: Messrs. Allen, Arnold, Beck, Blackwell, Champion, Eggimann, Fontenning, Frowde, Gauthier, Heinemann, Kistner and Callway, Klinkstedt, Kundig, Lamertin, Laupp, Leroux, Longmans, Green and Co., Lund, Macmillan and Co., Methuen, Milford, Nisbet and Co., Parker and Co., Picard, Reimer, Routledge, Schünke, Teubner, Töpelmann, and Weidmann.

The following authors have presented copies of their works: Messrs. R. Adolphe, L. Alexander, E. Babelon, A. Baldwin, H. L. Bell, M. Collignon, Prof. A. H. Cruikshank, Mr. J. Curle, Prof. W. Dörpfeld, Messrs. S. Eitrem, A. Elter, W. S. George, W. R. Halliday, R. T. Hart, Prof. F. Haverfield, Messrs. J. S. Jérôme, G. Klaffenbach, Prof. C. F. Lehmann-Haupt, Prof. W. R. Lethaby, Messrs. G. E. Lung, W. Mooney, T. Davis Pryce, A. Reinach, H. L. Roth, Montague Sharpe, Prof. D. A. Slater, Messrs. J. Sundwall, H. J. W. Tillyard, L. O. Th. Tudeer, Prof. T. Wiegand, Prof. A. Wilhelm, Prof. P. Wolters, and Mr. F. de Zulueta.

Miscellaneous donations of books have been received from Mr. H. L. Bell, Rev. A. H. Croke, Messrs. W. Farside, W. S. George, C. H. Haines, W. R. Halliday, G. D. Hardinge-Tyler, F. W. Hasluck, Prof. F. Haverfield, Messrs. G. F. Hill, W. H. Knowles, J. G. Milne, J. Penoyre, Prof. J. S. Reid,

Sir John Sandys, Miss C. Sharpe, Messrs. R. Phœbe Spiers, A. E. Zimmern.

A special debt of gratitude is owed to Mr. A. E. Zimmern who has presented to the Library a collection of over sixty volumes mainly dealing with ancient political economy and history.

Among the more important acquisitions are :—G. L. Bell, *Palace and Mosque at Ukhaidir* ; E. Chatelain, *Paléographie des Classiques Latines* ; the continuation almost to its completion of J. G. Frazer, *Golden Bough* ; F. Henkel, *Römische Fingerringe* ; *Inscriptiones Græcæ ad res Romanas pertinentes* ; the *Leib* collection of *Bronzes* by J. Sieveking ; E. H. Muntz, *Scythians and Greeks* ; Th. Mommsen, *Gesammelte Schriften* ; the Moscow *Exempla codicum Græcorum* ; H. Schrader, *Auswahl archaischer Marmor-Skulpturen im Akropolis-Museum zu Athen*.

All the maps, plans, and charts in the Library have now been mounted on linen arranged in portfolios and adequately catalogued. They will be found in alphabetical order under the main heading of *Maps* in the Library Catalogue. A considerable portion of the Library grant was devoted to this very necessary work, but now that portfolios have been provided the future expense in this department should not be heavy.

The chief feature of the year has been the publication of the complete Catalogue of the slides. This has been an expensive task as the work comprises more than 160 closely printed pages, and the proof correcting has been exceptionally, though necessarily, large ; but the Council feel sure that both cost and labour are well spent. New features in the Catalogue are a full index and a supplement of selected lists of slides. It has been distributed (1913) free to members of both Societies and is now on sale, 2/6 ; interleaved for accessions, 3/6.

The slides hired during the Session were 3,746, those sold 1,681 : 430 photographs were sold. The corresponding figures for last Session were 3,578, 506 and 354.

B.—Photographic Department.—Since the publication of the Catalogue, 473 Roman slides have been added to the collection. The Hellenic additions made for the Catalogue were very numerous, and, since its publication, it has seemed better to devote the time at the Librarian's disposal to strengthening the Roman section. In this Mr. Hardinge-Tyler's co-operation has been invaluable. It is hoped that generous donors will bear in mind that the standard of photography continually rises and that, to maintain the character of the collection, materials should be looked at critically before presentation. It is also highly desirable that accurate identifications and references should be supplied.

In addition to the long list of donors named in the preface to the Catalogue, the thanks of the Society are due for help in this department to the Institut d'Estudis Catalans, the Royal Numismatic Society, Mr. St. C. Baddeley, Professor R. C. Bosanquet, Miss Bulwer, Messrs. C. D. Chambers, G. L. Cheesman, G. A. T. Davies, Miss Gurney, Miss P. B. Mudie-Cooke,

Professor J. L. Myres, Miss Nicholson, Messrs. T. E. Peet, E. J. Seltman, A. J. Taylor, A. J. B. Wace, Mrs. Wilde, Messrs. E. H. N. Wilde, and A. G. Wright.

General Meetings.—At the first General Meeting, held November 11th, 1913, Mr. Ellis H. Minns read an illustrated paper on Two Greek documents of the first century B.C. from near Ayroman in Western Media. One of the parchments, being dated Anno Seleuci 225=88 B.C., was apparently the oldest document on parchment known, except a roll from Egypt referred to the 12th dynasty. The second was dated 295=22-1 B.C. Both related to conveyances of a vineyard called Dadbakabag. The wonder was that Greek was used in such a remote locality.

Professor Sayce, who replaced Sir Arthur Evans in the chair, said the interest and importance of the discovery lay in the evidence it afforded of the existence in the provinces to the north-west of what is now India of so strong an Hellenic element that Greek was used for legal and commercial purposes by persons who bore Iranian names and consequently could not have been of Greek nationality.

Mr. Minns' interesting paper will, it is hoped, be published, with the documents, in the next part of the *Journal*.

At the second General Meeting, held on Feb. 10th, 1914, Miss Jane Harrison read a paper on "Poseidon and the Minotaur." She urged (a) that the cult of Poseidon on the mainland of Greece was imported, not autochthonous; (b) that it reached the mainland from the South, not the North; (c) that in origin it was "Minoan," and in subsequent development became "Mycenaean," and ultimately Hellenic. The aspects of the god as Pontius, Hippius, and Taureus were explained on the new psychological method, which asks, not what the god is, but what are the social activities and social structure of his worshippers. As Pontius and Pontomedon Poseidon is the project of a people who were fishermen, traders, and thalassocrats, as Hippius of a people of horsemen, as Taureus of a people who as herdsmen worshipped the Bull. Miss Harrison then asked the question, Was there in antiquity a people who were fishermen, traders, thalassocrats, who owned thorough-bred horses, and who as herdsmen worshipped the Bull? The answer was obvious. Minos of Crete was the first of the thalassocrats; his palace accounts show his command of horses and chariots from Libya, and his people worshipped the Bull of Minos. The Minotaur was the primitive *point de repère* round which ultimately crystallized the complex figure of Poseidon.

At the third General Meeting, which was held on May 5th, 1914, Professor Ridgeway read a paper on "The Early Iron Age in the Aegean Area," of which he has kindly supplied the following summary:—

"All archaeologists up to 1836 held that the so-called Mycenaean or Bronze Age culture had been brought in by some invading people or foreign influence. He then put forward the thesis that it had been evolved in the Aegean basin by a race domiciled there from the Neolithic period, a view since amply substantiated, especially by Sir A. J.

Evans's grand discoveries at Knossos, which he (Professor Ridgeway) had said would prove, if not the chief focus, at least one of the chief foci of the Aegean culture. Schliemann and the rest had identified this Mycenaean culture with that of the Homeric poems. But as in the latter iron was in general use for weapons and implements, even for the ploughshare, Professor Ridgeway was led to the conclusion that the tall, blond Achaeans, or Hellenes, with their practice of cremation, use of iron weapons, round shields, brooches, so closely resembling the culture of the Early Iron Age of Central Europe and Upper Italy, were a 'Kellic' (Teutonic) tribe, who according to their own traditions had entered Greece, not all at once, but somewhere about the fourteenth century B.C., and had made themselves lords of the indigenous people. The latter were termed Pelasgians by the Greeks themselves, though of course there were many different tribal names, and some tribes were more advanced than others. He held that this autochthonous race of Greece was closely akin to the dark-complexioned indigenous Thracians, a view since substantiated by our fuller knowledge of the prehistoric archaeology of Thrace and Thessaly. Messrs. Wace and Thompson (*Prehistoric Thessaly*, pp. 230-33) have disputed the Pelasgian theory on the ground that the early dwellers in the Argolid, the Minyans of Orchomenus, &c., have different kinds of pottery, but their arguments would lead to the conclusion that differences in primitive and local pottery denote not merely a tribal, but a racial difference.

"The two chief objections raised against his (Professor Ridgeway's) view that the Homeric Achaeans were a fair-haired tribe who brought in the use of iron brooches, round shields, practice of cremation, and the Geometric or Dipylon style of ornament, were (1) that there was no archaeological evidence for the 'overlap' of iron and bronze weapons representing the Homeric poems, as they stand, (2) that no trace of the Early Iron Age culture had been found in Phthiotis, the home of the Achaeans.

"(1) Mr. Andrew Lang argued that there were no swords or spears of iron in use in Homer (although that metal was used for axes, knives, arrows, plough), because the iron was too soft for spears and swords, and his view was adopted by Mr. T. W. Allen and by Messrs. Wace and Thompson in a recent paper. Yet the swords and spears in the hall of Odysseus are collectively termed 'iron' (*Od.*, xvi. 294; xix. 13). The line cannot be erected as 'inorganic,' as the whole machinery for the slaying of the suitors depends upon it. Already East Crete had shown iron and bronze swords in the same tomb, though not with the same individual. Professor Ridgeway now exhibited a 'find' from a grave at Gnidus comprising six bronze javelin heads (about 6 in. long), five of iron of like types, a small iron knife, and a whetstone, iron rust still adhering to the bronze specimens. Thus the same individual had bronze and iron weapons at the same moment, confirming his (Professor Ridgeway's) argument for Homer. If the owner of these javelins had slain a foe with one of his iron specimens, there seems no reason to doubt that the bard would have celebrated his exploits with the conventional phrase that 'he slew him with the ruthless bronze.' Thus, though muskets have not been used by the British Army since the Crimean War, instruction is still given in musketry, and there are still Grenadier Guards, though hand grenades have not been used since the Peninsular War.

"(2) Messrs. Wace and Thompson, having failed to find any Early Iron tumuli in Thessaly, in their *Prehistoric Thessaly* equate the 'local Thessalian civilisation, though by itself of too low a type to fulfil Homeric requirements,' with the Homeric culture. Mr. T. W. Allen, following them, regards this as deadly to Professor Ridgeway's theory. But local Greek archaeologists had already noticed and partly investigated ten large tumuli at Halos in Phthiotis, not far from the Spercheios, to which Achilles dedicated his hair. Some of the objects were already in the Halmyros Museum. Since then Messrs. Wace and Thompson have excavated one of these tumuli containing sixteen 'pyres' with cremated remains, iron spears, swords and knives, brooches and pottery of simple Geometric form. The swords are of two varieties, and belong to a general type spread over Central Europe and Italy. They differ in some respects from the Hallstatt and Glasinatz swords, but their tendency to widen at the lower end, as Messrs. Wace and Thompson point out, brings them closer to the Danubian area than elsewhere. Thus the

Early Iron Age Culture has been proved for Phthiotis. But Messrs. Wace and Thompson, who are committed to a Bronze Age period as the background in Thessaly for Homer, try to differentiate the Halos culture from that of Homer, by stating (a) that no iron swords are in use in Homer (which is contrary to the Homeric text and to the evidence just given for the overlap of iron and bronze in the case of javelins), and (b) that whilst there are no urns at Halos, the burnt bones are always placed in urns in Homer. From the inurning of the bones of great men like Hector, they hastily assumed that ordinary folk were similarly treated. But the burnt remains of Elpenor (*Od.* xii. 13-16) were simply laid under a mound without any urn. Messrs. Wace and Thompson suggest the ninth century B.C. as the date, making it Middle Geometric. Their ground is that as there are iron swords, it is 'post-Homeric,' but that assumption has been disproved. But there are two classes of pottery, jugs with cutaway neck, and ring-necked vases, which belong to the Bronze Age, and which they have to term 'survivals.' The presence of such types rather suggests the period succeeding the Bronze Age, and thus points to at least B.C. 1000. The brooches, though not of the earliest types, may well date from the same period, B.C. 1000. They rely also on the occurrence of a bird and of meander on the pottery. But, as animal forms are already found on Bronze Age objects in the Danubian area, and as the meander is only a variety of the zigzag, and known at Sparta as early as B.C. 850, the grounds for their dating seem quite insufficient, and there is no reason why the cemetery should not date from B.C. 1000. That it is Achaean they seem to admit, for they say 'that it may perhaps be an Achaean burial in degenerate or modified form. The position of Halos in Achaia Phthiotis makes this view seem plausible.' As their arguments for the later date do not hold, we may conclude that the cemetery belongs not merely to Achaeans, but to Achaeans of the Homeric Age."

A set of objects from tombs of the Han Dynasty, illustrating the overlap of iron and bronze implements in China, and some Gaulish iron weapons and a La Tène brooch from Ephesus, were also shown.

Sir Henry Howorth, in remarking upon the paper, drew attention to the important questions arising from the traces of the Iron Age in the island of Elba.

Sir Arthur Evans wholly differed from Professor Ridgeway as to the idea that the Iron Age civilization had descended from the Hallstatt area into Greece. A mass of parallel evidence showed in his opinion, that the use of iron began in Greece and the Eastern Mediterranean some two centuries at least before it was known on the Middle Danube. In Sub-Minoan Crete its beginnings could be traced as early as the twelfth century B.C. It was known about the same time in Greece and Cyprus. Dr. Hoernes, the first authority, makes the first transition from bronze to iron in the Hallstatt Province about 1000 and brings the Hallstatt bronze swords down to 900-800, some three centuries later than the Aegean and East Mediterranean group. As regards the origin of the Iron Age civilization in Greece, Professor Ridgeway's main theses reversed the currents of history.

Professor Ridgeway replied that Sir Arthur Evans, for the date of Hallstatt and the brooches, was relying on the chronology of Montelius.¹

¹ Sir Arthur Evans desires to say that he was not in any way referring to Montelius' theories, neither was he discussing the origin of the *fibulae*, which goes well back into the Bronze Age and has nothing to do with the beginning of iron.

which was based on the assumption that the brooch had been invented in Greece and gone north; whereas, since he himself had shown that the brooch was invented in the north and had come down from the north, the chronology had to be revised and the date of Hallstatt, &c., put back. He pointed out that Hoernes, though admitting that the brooch had been invented in central Europe, still clung to the chronology of Montelius based on the assumption that the brooch was invented in Greece.

Finance.—The expenditure during the current year has been unusually heavy, the Income and Expenditure Account showing a deficit balance on the year of £241. Two items are mainly responsible for the large adverse balance: the cost of the new Catalogue of Lantern slides (to which the Roman Society will contribute a proportion) has been £143, while an additional £100 has been spent on the Society's *Journal*. Apart from these items the expenditure under the several headings appears at about the average amount. On the Income side of the account the only important difference is in the amount received for Entrance Fees, which shows a drop of £80. This, perhaps, was only to be expected, as the large increase in the membership roll last year was hardly likely to be maintained. With this exception all the sources of income show no falling off. The sales of the *Journal* are a trifle higher, while the Lantern Slides account, but for the charge for the new Catalogue above referred to, would have shown a balance of a few pounds.

The Cash Balance stands at £516 as compared with £962 last year. The heavier expenses met during the year account for part of the reduction, but, as was proposed in the last Report, a further £191 has been invested to cover receipts for the Endowment Fund and for Life Compositions. This sum, therefore, is still in the Balance Sheet under Assets in an increased amount under the heading of Investments. The amount appearing for Debts Payable, £406, is slightly higher than last year, as is also that for Debts Receivable which now stands at £176. The amount of arrears of members' subscriptions outstanding when the books closed was £117, but this amount is omitted in making up the accounts.

The total of the names on the ordinary membership roll is now 932 as against 946, the losses by death and other causes during the year having been very heavy, with the result that in spite of a good number of new members the total shows a decrease. The number of subscribing Libraries now stands at 209—an increase of three.

In presenting the financial statement the Council would point out that although, owing to heavy special expenditure, this year's figures do not appear so satisfactory as usual, the ordinary revenues have been well maintained. With a normal outlay next year the accounts should show a balance on the right side.

The Council must also express thanks again for the valued assistance given by members in making the Society's work known among their friends. So long as the standard of efficiency to which this report bears witness is

maintained, they feel that in so doing members are conferring rather than incurring an obligation. But to maintain that efficiency, in so many varied activities, an increase of membership is much to be desired, and any further help in this direction will be appreciated by the Council.

The Chairman then delivered his Presidential Address in the course of which he suggested a plan for the edition of a portion of Strabo's works, somewhat on the lines of Sir J. G. Frazer's *Pausanias*, in which the co-operation of the Hellenic Society would be desired. He concluded by moving the adoption of the Annual Report, which was seconded by Sir Archibald Geikie, put to the Meeting, and carried unanimously.

By a new arrangement the printed list of nominations for the election or re-election of officers submitted by the Council was adopted by a show of hands and not, as heretofore, by ballot.

FINANCIAL STATEMENT.

A comparison with the receipts and expenditure of the last ten years is furnished by the following tables:—

ANALYSIS OF RECEIPTS FOR THE YEARS ENDING:—

	31 May, 1909.	31 May, 1908.	31 May, 1907.	31 May, 1906.	31 May, 1905.	31 May, 1904.	31 May, 1903.	31 May, 1902.	31 May, 1901.
Subscriptions, Current	£ 700	£ 789	£ 753	£ 759	£ 773	£ 771	£ 766	£ 747	£ 776
Arrears	76	90	72	70	82	83	84	78	87
Life Compositions	94	94	47	47	15	33	94	53	410
Literaries	154	168	173	188	199	197	196	196	201
Entrance Fees	111	103	85	78	94	107	65	30	134
Dividends	49	44	61	62	62	62	62	62	62
Rent: (B.S.A. & B.S.R.)	—	—	10	10	10	13	22	20	20
Endowment Fund	30	475	17	21	2	6	1	1	10
"Excavations at Phylakopi," sales	52*	28*	21*	18*	12*	7*	10*	4*	4*
"Facsimile Codex Vaticanus," sales	93*	8*	17*	3*	—	—	12*	4*	4*
Lantern Slides Account	—	15*	3*	5*	—	7*	—	12*	3*
Emergency Fund (for Library Fittings)	—	—	—	—	—	327	67	—	—
Rent, Use of Library, &c. (Roman Society)	—	—	—	—	—	—	58	66	55
	1,390	1,814	1,239	1,263	1,390	1,610	1,447	1,253	1,472

* Receipts less expenses.

ANALYSIS OF EXPENDITURE FOR THE YEARS ENDING:—

	31 May, 1909.	31 May, 1908.	31 May, 1907.	31 May, 1906.	31 May, 1905.	31 May, 1904.	31 May, 1903.	31 May, 1902.	31 May, 1901.
Rent	£ 88	£ 98	£ 100	£ 100	£ 100	£ 109	£ 188	£ 205	£ 205
Insurance	18	13	14	15	15	13	14	13	9
Salaries	165	176	178	178	204	241	271	263	267
Library: Purchases & Binding Heating, Lighting, Cleaning, &c.	100	65	85	85	85	58	73	103	86
Stationery, Printing, Postage, Stationery, etc.	142	158	101	119	140	120	151	170	193
Printing and Postage, History of Society	24	—	—	—	—	—	—	—	—
Printing and Postage, Pro- ceedings at Anniversary	10	—	—	—	—	—	—	—	—
Lantern Slides Account	—	—	—	—	—	—	—	—	—
Photographs Account	5*	—	—	—	12*	—	10*	—	130
Cost of Journal (less sales)	371	350	356	406	363	512	385	362	403
Cost of Journal, Reprint of Vol. XXIII.	122	—	—	—	—	—	—	—	—
Grants	260	125	225	140	185	130	150	150	130
Roman Society, Expenses of formation	—	—	—	—	—	51	5	—	—
Library Fittings	—	—	—	—	—	408	18	—	—
Depreciation of Stocks of Publications	123	104	40	8	53	57	3	4	3
	1,573	1,095	1,069	1,249	1,161	1,740	1,310	1,347	1,373

* Expenses less sales.

	£	s	d.	£	s	d.
To Printing and Paper, Vol. XXXIII., Part II., and XXXIV., Part I.,	400	18	9			
Plates	65	3	6			
“ Drawing and Engraving	55	7	9			
“ Editing and Reviews	79	11	0			
“ Packing, Addressing, and Carriage to Sendloers ..	71	4	8			
	672 6 2					
	<u>672 6 2</u>					
By Sales, including back Vols., from June 1, 1913, to May 31, 1914:						
Per Macmillan & Co., Ltd.	122	11	0			
“ Hellenic Society	15	5	6			
	<u>137 16 6</u>					
“ Contribution by Sir Charles Waldstein towards cost of his article						
“ Receipts for Advertisements						
Balance to Income and Expenditure Account						
	<u>672 6 2</u>					

NOTE.—Owing to Vol. XXXIV., Part I., not being issued till after the close of the financial year, and account figures being approximate, approximate figures of the cost, with an estimated amount for the sales of this part have been included above.

EXCAVATIONS AT PHYLAKOP' ACCOUNT, FROM JUNE 1, 1913, TO MAY 31, 1914.

Calculus showing Financial Result from Date of Publication to May 31, 1914.	Account for Current Year.
£ 1. 2.	£ 1. 2.
140 7 11	—
—	5 1 0
£140 7 11	£5 1 0

Deficit Balance brought forward (excluding value of Stock).....

Balance on Current Year to Income and Expenditure Account

By Sale of 5 Copies during year:

Deficit Balance as May 31, 1914 (excluding value of Stock)

Calculus showing Financial Result from Date of Publication to May 31, 1914.	Account for Current Year.
£ 1. 2.	£ 1. 2.
140 7 11	—
—	5 1 0
£140 7 11	£5 1 0

FACSIMILE OF THE CODEX VENETUS OF ARISTOPHANES' ACCOUNT. FROM JUNE 1, 1913, TO MAY 31, 1914.

	Column showing Financial Result from Date of Publication to May 31, 1914.	Account for Current Year.	Column showing Financial Result from Date of Publication to May 31, 1914.	Account for Current Year.
To Deficit Balance brought forward (excluding Value of Stock)	£ 16 6	£ 1 8	£ 7 6	£ 7 6
" Half Balance to American Archaeological Institute	3 13 6	3 13 6	78 3 0	
" Half Balance to Income and Expenditure Account	—	3 13 6		
	<u>£85 10 0</u>	<u>£7 7 0</u>	<u>£85 10 0</u>	<u>£7 7 0</u>
By Sale of 1 Copy				
" Hellenic Society's Deficit Balance at May 31, 1914 (excluding Value of Stock)				

LANTERN SLIDES AND PHOTOGRAPHS ACCOUNT. FROM JUNE 1, 1913, TO MAY 31, 1914.

To Slides and Photographs for Sale	£ 48 3 5	£ 1 8	£ 71 7 9	£ 7 6
" Slides for Hire	20 13 9		17 14 3	
" Photographs for Reference Collection	19 19 8			
Less Purchases for Roman Society	88 16 10		89 2 2	74 13 9
Cost of New Catalogue	25 11 10	63 5 0		1 8 6
		<u>143 5 3</u>		<u>130 6 0</u>
		<u>£206 8 3</u>		<u>£206 8 3</u>
Less Receipts for Roman Society				
By Receipts from Sale of Catalogues				
" Balance to Income and Expenditure Account				

LIBRARY ACCOUNT. FROM JUNE 1, 1913, TO MAY 31, 1914.

To Purchases	£ 53 2 0	£ 1 8	£ 54 10 0	£ 1 8
" Binding	39 6 10			2 14 6
		<u>92 8 10</u>		<u>89 14 8</u>
By Received for Sales of Catalogues, Duplicates, &c.				
" Balance to Income and Expenditure Account				
		<u>£92 8 10</u>		<u>£92 8 10</u>

BALANCE SHEET, MAY 31, 1914.

<i>Liabilities.</i>		<i>Assets.</i>	
	£ s d		£ s d
To Debits Payable	456 10 7½	By Cash in Hand—Bank	268 8 7
" Subscriptions carried forward	356 15 4	" on Deposit	300 0 0
" Suspense Accounts	1 1 0	Assistant Treasurer	1 2 0
" Endowment Fund	375 1 0	Petty Cash	8 10 0½
(Includes legacy of £200 from the late Canon Adam Farrer)			310 1 1½
" Emergency Fund (Library Fittings and Furnitures)		Debits Receivable	170 1 0½
Total Received	344 48 6	Investments (Life Compositions)	4384 3 11
" Life Compositions and Donations—		" (Endowment Fund)	570 0 0
Total at June 1, 1913	£1962 9 0		1054 3 11
Received during year, 1914	15 15 0	Emergency Fund—Total Expended	426 0 0
£15 15 0	1028 4 0	Valuations of Stocks of Publications	480 0 0
Less carried to Income and Ex-		" Library	350 0 0
penditure Account, over at			
£1012s.—Members deceased	39 0 0		
Excess of Assets over Liabilities			
At June 1, 1913	£73 10 8½		
Less Debits Balance from Income & Expenditure Account	241 16 10		
Balance—Excess of Assets at			
May 31, 1914	30 15 10½		
	£302 6 1		£302 6 1

Examined and found correct.

(Signed) E. F. CLAY,
W. L. F. MACKENZIE.

TWELFTH LIST OF BOOKS AND PAMPHLETS

ADDED TO THE

LIBRARY OF THE SOCIETY

SINCE THE PUBLICATION OF THE CATALOGUE

1913—1914.

With this list are incorporated books belonging to the Society for the Promotion of Roman Studies. These are distinguished by R.S.

NOTE.—The Original Catalogue published in 1903, with all the supplements appended, can be purchased by members and subscribing libraries at 3/6 (by post 3/10). Applications should be made to the Librarian, 19, Bloomsbury Square, W.C.

About (E.) *La Grèce contemporaine*. 8vo. Paris. 1897.

Alexander (L.) *The Kings of Lybia*. 8vo. [Princeton.] 1913.

Alexandria. *Rapport sur la Marche du Service du Musée en 1912*.

4to. Alexandria. 1913.

Amelung (W.) See Arndt (P.) *Photographische Einzelaufnahmen antiker Skulpturen*.

Anthropological Institute, The Royal

Occasional Papers.

1. *Eastern Uganda: an ethnological survey.* By C. W. Hobley. 8vo. 1903.

2. *Physical deterioration.* 8vo. 1905.

3. *Ikoma folk stories from S. Nigeria.* By E. Dayrell. 8vo. 1913.

Miscellaneous Publications.

Index to the publications of the Anthropological Institute, 1848-1891. By G. W. Bloxam. 8vo. 1893.

Anthropometric Investigation in the British Isles. [Report of the Committee of the British Association.] 8vo. 1909.

The Metals in Antiquity. [Huxley Memorial Lecture for 1912.] By W. Gowland. 8vo. 1912.

Notes and Queries on Anthropology. By B. Freire-Marreco and J. I. Myers. Fourth edition. 8vo. 1912.

- A.S. Archivio Storico per le provincie Napoletane.** Vols. XX, XXIII. 8vo. Naples. 1895-8.
- Aristophanes.** The Acharnians, with a translation into English verse by R. Y. Tyrrell. 8vo. Oxford, &c. 1914.
- Aristophanes.** The Acharnians. Ed. R. T. Elliott. 8vo. 1914.
- Aristotle.** The Nicomachean Ethics. Ed. F. H. Peters. Tenth edition. 8vo. 1906.
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- Arnim (H. von)** Leben und Werke des Dio von Prusa. 8vo. Berlin. 1898.
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- Athens.** Acropolis Museum. Auswahl archaischer Marmor-Skulpturen. By H. Schrader. Text and Plates. Small and large folios. Vienna. 1913.
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- Athens.** National Museum. Κατάλογος τῶν ἀρχαίων νομισμάτων. By A. Postolakas. Vol. I. 4to. Athens. 1872.
- Azambuja (G. d')** La Grèce ancienne; avec une préface par Edmond Demolins. 8vo. Paris. 1906.
- Babelon (E.)** La politique monétaire d'Athènes au V^e siècle avant notre ère. [Rev. Numis. 1913.] 8vo. Paris. 1913.
- Bacon (B.W.)** The Making of the New Testament. 8vo. [1914.]
- Baddley (S.)** *Translator.* See Boni (G.), Lapis Niger.
- B.S. Baldes (H.) and Behrens (G.)** Sammlung der Vereine für Altertumskunde im Fürstentum Birkfeld. [Kataloge Westund Süddeutscher Altertümer. III.] 8vo. Frankfurt. 1914.
- Baldwin (A.)** Les monnaies de bronze dites incertaines du Pont ou du royaume de Mithridate Eupator. [Rev. Numis. 1913.] 8vo. Paris. 1913.
- Balkan War.** Les cruautés Bulgares en Macédoine orientale et en Thrace. 1912-13. Faits, rapports, documents, témoignages officiels. 8vo. Athens. 1914.
- Barbagallo (C.)** La fine della Grecia Antica. 8vo. Bari. 1905.
- Barbagallo (C.)** La rovina economica della Grecia Antica. 8vo. [S.L.E.D.]
- Barbelenet (D.)** De l'aspect verbal en latin ancien et particulièrement dans Térence. 8vo. Paris. 1913.
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- Barker (E.)** The political thought of Plato and Aristotle. 8vo. 1906.

- Barker (E. R.) Buried Herulanum. 8vo, 1908.
- R.S. Barker (E. R.) Rome of the Pilgrims and Martyrs. 8vo, 1913.
- Bate (D. M. A.) See Trevor-Battye (A.) Camping in Crete.
- Bates (O.) The Eastern Libyans. 4to, 1914.
- Bechtel (F.) Die griechischen Personennamen. See Fick (A.).
- R.S. Bell (G. L.) Palace and Mosque at Ukhaidir. 4to, Oxford, 1914.
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- Bergman (J.) Uppstäekterna i Boscorale vid Pompeji. 8vo, Stockholm, 1901.
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- R.S. Behrens (G.) Sammlung der Vereins für Altertumskunde im Fürstentum Bickenfeld III. See Baldes (H.).
- Biedermann (E.) Studien zur ägyptischen Verwaltungsgeschichte in ptolomäisch-romischer Zeit. Der Bandusios *ἱεροποιός*. 8vo, Berlin, 1913.
- Blackman (A. M.) The temple of Derr. See Cairo, supplementary publications.
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Department of Coins and Medals.
 Catalogue of Greek Coins in the British Museum, Palestine. By G. F. Hill. 8vo, 1914.
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- Burekhardt (J.)** *Griechische Kulturgeschichte. Vols. II, III.* [1900]. 8vo. Berlin and Stuttgart. [N.D.]
- Burnet (J.)** *Die Anfänge der griechischen Philosophie. 2nd Edition.* German Translation by E. Schenkl. 8vo. Leipzig and Berlin. 1913.
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- R.S. Cagnat (R.)** *L'armée romaine d'Afrique et l'occupation militaire de l'Afrique sous les Empereurs. Vol. II.* 4to. Paris. 1912.
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Sarcophages de l'Époque Ptoémaïque à l'Époque Sabaïte. II.
By A. Moret. 4to. Cairo. 1913.
Statues et statuettes de rois et de particuliers. III. By
G. Legrain. 4to. Cairo. 1914.
Stone Implements. By C. T. Carrelly. 4to. Cairo. 1913.
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Excavations at Saqqara 1911-12. By J. E. Quibell. 4to. Cairo. 1913.
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- Callimachus.** *Callimachi hymni et epigrammata.* Ed. U. von Wilamowitz-Moellendorf. 8vo. Berlin. 1897.
- Carnuntum.** *Bericht über die Ausgrabungen in Carnuntum. 1883, 1889-1896.* Vienna. 1884-1897.
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- Cary (H.)** *Translator. See Herodotus.* 8vo. 1904.
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- Charts.** Pamphlet on the correction of charts. See Maps.
- Chipiez (C.)** See Perrot (G.)
- Choisy (A.)** L'art de bâtir chez les Égyptiens. 8vo. Paris. 1904.
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- Collignon (M.)** Le consul Jean Giraud. [Mém. de l'Acad. d. Ins., 39.] 4to. Paris. 1913.
- Conder (C. R.)** The Tell Amarna tablets. Translated by C. R. Conder. 8vo. 1893.
- Conway (R. S.)** *Editor.* See Lévy.
- Cornford (F. M.)** From Religion to Philosophy. 8vo. 1912.
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- n.s. Corstopitum.** Report on the Excavations in 1912. By R. H. Forster, W. H. Knowles and others. [Arch. Aeliana IX.] 8vo. Newcastle-upon-Tyne. 1913.
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- Dalton (O. M.)** Byzantine art and archaeology. 8vo. Oxford. 1911.
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8vo. 1910.
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- Deseine (F.)** L'ancienne Rome. 4 vols. 8vo. Leyden. 1713.
- Dessan (H.)** De tegulis quibusdam in Baetica repertiis.
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- Ellis (R.)** The correspondence of Fronto and Marcus Aurelius.
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8vo. Leipzig. 1810.
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8vo. Stockholm. 1897.
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- Fellows (C.)** *Account of the Ionic trophy monument excavated at Xanthus.*
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- Fellows (C.)** *Introductory remarks to Lycia, Caria, Lydia.*
8vo. 1847.
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- Fick (A.)** *Die griechischen Personennamen.* 2nd edition. By P. Bechtel and A. Fick. 8vo. Göttingen. 1894.
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- n.s. Fischer (P. D.)** *Italien und die Italiener.* 2nd edition.
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- Francke (J.)** *De manmissionibus Delphicis.* 8vo. Gießen. 1904.
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- Frazer (J. G.)** *The Golden Bough. A study in Magic and Religion.*
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Part IV. Adonis. Attis. Osiris. 2 vols. 8vo. 1914.
Part VII. Balder the Beautiful. 8vo. 1913.
- Freire-Marreco (B.)** *Notes and queries on anthropology.* See Anthropological Institute.
- n.s. Freshfield (D. W.)** *Hannibal once more.* 8vo. 1914.
- Fronto.** *[Emendations on the text of Fronto.]*
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- Grote (G.) A History of Greece from the time of Solon to 403 B.C., condensed and edited by J. M. Mitchell and M. O. B. Caspari. 8vo. 1907.
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- Hasselquist (F.) Voyages and travels in the Levant in the years 1749, 50, 51, 52. 8vo. 1766.
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 B128 " " remains of cornice, 1902.
 B430 " " the podium, 1902, looking east.
 B429 " " view from, to S. Maria Nuova (Prætorium Romanum).
 B503 " " Venus Vestæ, within looking east, 1902.
 B154 " " aedificia.
 B155 " " Atrium Vestæ.
 B504 " " foundations, 1902.
 B174 " " mill (Müllstein, J, 313; *Archæologia*, xlix.)
 B209 Temple of Antoninus and Faustina before excavation,
 B103 " " " " excavations in front of.
 B104 " " " " excavations in front of.
 B193 Church of SS. Cosma e Damiano, entrance.
 B440 Caracalla (so-called).
 B441 " "
 B427 Basilica Maxentii.
 B422 " "
 B423 " " excavations, 1900.
 B437 Temple of Bacchus, remains of curved cornice, 1890.
 B411 Basilica Aemilia, plan.
 B412 " " and shrine of Venus Cloacina.
 B413 " " site of porch.
 B414 " " the great inscription.
 B415 " " fragments, 1901.
 B416 " " cornice, 1900.
 B417 " " excavations, 1900.
 B418 " " " 1900.
 B419 " " " 1901, a tabernacle of 1st century.
 B420 " " " 1902.
 B500 " " inside and bustum of metopa.
 B336 Altar of Julius Caesar.
 B438 " " and column base.
 B491 Regia, 1903.
 B156 " " from E.
 B432 " " path dividing Regia and temple of Vesta.
 B433 " " circular shrine.
 B434 " " excavations of the tholos, 1901.
 B505 " " Republican wall.
 B424 S. Maria Antiqua, excavations, 1902.
 B426 Temple of Augustus.
 B288 Temple of Venus and Roma.
 B157 " "
 B425 Shrine of Venus Cloacina.
 B439 Tower of Iannone, base of.
 B506 Sæmæ Via, 1900.
 B442 " "
 B443 " "
 B444 " " made for Charles V's triumph.
 B309 The Arch of Titus.
 B127 Porticus Minervæ (cf. *Plinius, Ancient Rome*, p. 374.)

Colosseum.

B294	The Colosseum, exterior.
B440	" " and Meta Sudans.
B453	" " restored.
B302	" " interior.
B450	" " "
B451	" " "
B452	" " "
B447	" " upper stage.
B454	" " restored.

The Palatine.

B312	Isacant view.
B466	Caligula's palace.
B467	" " encephalum and stuechi.
B468	House of Domitian.
B469	" " site of 1812 excavations.
B477	" " marble wall-lacination.
B465	Remains near house of Livia, 1901.
B464	Stadium, looking N.
B20	" " "
B463	" " N.W. angle.
B462	" " looking S.
B465	" " "
B470	The Cryptoporthica.
B471	" " "
B461	The Villa Milla, from beyond Stadium, 1902.

B483	Baths of Caracalla.
B472	The Pantheon, exterior.
B472	" " interior.
B303	Temple of Vesta.
B484	Mamertina prison.
B466	Palazzo Barberini.
B398	Via Sistina, doorway in.
B482	Villa Coslincentina.

Churches.

B481	Church of S. Clemente, interior.
B490	S. Clemente (10th century) exterior.
B310	St. John Lateran; distant view.
B474	" " east front.
B479	" " colonnade.
B301	S. Maria Maggiore, facade.
B476	S. Paolo fuori le mura, interior.
B475	" " " "
B477	" " " "
B290	" " " "

Borgo. &c.

B292	Castel S. Angelo and St. Peter's.
B474	Piazza S. Pietro and Vatican.
B293	Ponte Ratto.

Roads to Rome

B67	Via Appia, first milestone, Capitol, Rome.
B394	" tomb of Cecilia Metella.
B311	" circus of Romulus and Maxentius.
B167	" quadrat at Aricia.
B55	" Valle d'Asciola, archway in retaining-wall.
B59	" Valle d'Ariccia, blocked archway in retaining-wall.
B40	" cutting of, north of Vigna.
B62	" Ponte Tufano between Camillus Forks and Benevento.
B63	" Ponte d'Apolonia between Caudine Forks and Benevento.
B64	" Ponte Corvo between Camillus Forks and Benevento.
B65	" cutting of road towards Vevea.
B660	Via Tiburtina, Ponte Leoneo (<i>P.D.S.B.</i> iii, pl. xi, fig. 12.)
B78	Via Trilana, Ponte-Rotta in valley of Corvino.
B79	" " " "
B86	" " " "
B51	" Ponte S. Spirito.
B92	" Ponte della Chiavella below Braccialongo.
B23	" " " "
B84	" Ponte del Ladroni.
B85	" east of Forum Nervae.
B94	" medieval road on line of, near Rura.

Aqueducts.

B180	Anio Novus. Spouts Aquae Claudiae.
B161	" Spouts of Aquae Marcia, Tepula and Julia outside Porta Maggiore, passing through Aurelian Wall, and crossed by Aquae Claudia and Anio Novus.
B519	Ponte Lupo: Anio valley.
B182	" "
B129	Tor Ficana, elevation and section (<i>Archiv. Aqueducts</i> , pl. xxv.)

ITALY, OTHER THAN ROME.

Maps.

B0448	N. Italy, physical map, without names.
B0051	" " " " another rendering.
B0053	N. Etruria " "
B0054	S. Latium " "

Towns, &c.

B157	Ariccia, Via Appia.
B502	Amsini, terrace, Albergo Cappacini.
B159	Aquila, church of Conzatti (late 13th century work.)
B174	Ardea, schismata earthworks (<i>Hobler, Annale dell' Inst. Ital.</i> , 1884.)
B97	Arteria, arc wall (<i>Stapp, Papers, Amer. Sch. at Rome</i> , i, p. 101.)
B38	" S. W. wall.
B39	" eagle on base (<i>Stapp, Papers, Amer. Sch. at Rome</i> , i, 102.)
B40	" owl on altar in old church (<i>ib.</i> i, 104.)
B022	Assisi, temple of Minerva.
B167	Bandusiae, "Fons Bandusiae."
B65	Benevento, Ponte Labroso, near.
B94	" Ponte Rotta on the Calore.
B90	Cannosa, view.
B91	" bridge at.

- B73 **Capua**, amphitheatre at.
 B71 " tomb near (la Concachia.)
 B72 " " (Cento camera or Carenti vecchia.)
 B74 " bridge over Volturnus at Caedunum.
 B168 **Caracoli**, walling (Sepp. *Papera, Amer. Sch. at Rome*, i, 125.)
 B325 **Chiusi**, unadorned doors of tomb.
 B171 **Corti**, polygonal walling.
 B2690 **Conca**, buffaloes at.
 B67 **Corratia**, (Quatria), site of.
 B83 " walls of.
 B2031 **Falerii**, plan of the valley of the Traja.
 B166 " Porta di Giove.
 B6653 " walls and west gate.
 B329 **Fissile**, theatre.
 B527 " heating chamber of baths.
 B60 **Fondi**, ancient Fundi.
 B70 " lake of.
 B74 **Formia**, so-called tomb of Cicero.
 B175 **Flumeri**, town.
 B93 **Giardiniano**, dolung near.
 B93 " menhir at.
 B94 " " "
 B6631 **Grotta di Tori**, opus polygonatum in cryptoposticus of villa. (*Cl. P.R.S.E.* iii, pl. 2, fig. 3.)
 B523 **Gubbio**, the theatre.
 B529 " Mausoleo Gentio.
 B17 **Mala**, castle and Monte Valmore.
 B129 **Ofanto** (Anfidia) from Ponte di Pietra dell' Oglio.
 B67 " " " " Ponte di Pietra dell' Oglio (medieval.)
 B594 **Ostia**, building (wrongly called a republican cistern.)
 B6666 " fountain in the Via della fontana (1897.)
 B6667 " cofferdam in barracks of Vigiles.
 B6653 " theatre, columns behind stage. (*O.F.S.* iv, 1.)
 B530 " " masks on frieze.
 B631 " " seen through arches.
 B553 " reach of the Tiber near.
 B554 " dolia in the so-called 'oil stores.' (*J.R.S.* ii, fig. 23.)
 B89 **Otranto**, ancient Hydruntum.
 B173 **Palestrina**, archaic altar.
 B164 " polygonal city wall.
 B433 **Pisa**, baptistery.
 B306 **Pompeii**, forum.
 B309 " house of the Faun.
 B304 " " " "
 B306 " exterior of great theatre from S.E. with columns of *Arum triangularis*.
 B307 " altar and steps of temple of Apollo.
 B669 " exterior of Herculaneum gate and sepulchral benches of Veio and Mamia.
 B153 **Porto d'Anzio**, coast at.
 B193 **Ravello** (near Anagni), street.
 B496 " " Palazzo dei Refoli.
 B167 " " " "
 B408 " " " "
 B500 " " " "
 B199 " " S. Maria di Gradejo.
 B501 " " road.
 B332 " doorway of Hotel Belvedere (Palazzo Affini) made of marble fragments.
 B523 **Reverna**, Mausoleum of Theodora.
 B394 " S. Appollinare in Classe, exterior.

- B335 **Tarragona**, the aqueduct.
 B357 " the Roman garrison of Medol.
 B350 **Vich**, the Roman temple.
 B331 " " " angle of wall.

BALKAN AREA.

- B651 **Dacia**, map of First Dacian War (Cichorius, *Trojanwille*).
 B4003 " " " part of above on larger scale.
 B652 " " the Sarmely Carpathians with sites of Dacian remains, and supposed line of Roman advance in A.D. 102.
 B656 " Mount Scirien.
 B653 " " lakalot under.
 B654 " Sarmak pass.
 B655 " Mt. Verfa bei Petra.

ROMAN GERMANY.

- B376 Map of the German campaigns of Germanicus.
 B377 " Nassau, showing the *Limes* with its block-houses.
 B378 " the Upper German *Limes* to the S. of the Main.
 B374 **Halterm** (Westphalia), Roman camp at Ufer-Kastell, general plan of site and environs.
 B375 " plan of the camp.
 B377 " the oldest outrenchment.
 B372 " restoration of palisades from without and within.
 B373 " the ditch, 1902.
 B400 **Trier**, the amphitheatre.
 B39 " the so-called *Kaiserpalast*.
 B38 " the Porta Nigra from within.
 B37 " " " from without.

ROMAN GAUL.

- B40 **Arles**, the amphitheatre, general view of interior.
 B44 " " view of upper part.
 B43 " " outer gallery.
 B45 " " view looking down into street.
 B47 " the theatre.
 B49 " " with the Tour de Roland.
 B520 " " collected architectural fragments.
 B521 " " " "
 B49 " Place du Forum.
 B51 **Autun**, Porte d'Armes.
 B52 " Porte St. Martin.
 B54 **Carpentras**, the arch, figures on the façade.
 B55 " " scales of the interior.
 B50 **Nîmes**, the Maison Carrée.
 B54 " the amphitheatre, general view.
 B51 " " view of upper portion.
 B57 **Orange**, the triumphal arch, general view.
 B54 " " view of an angle.
 B53 **Pont du Gard**, general view from the river-level.
 B523 " " same view from above.
 B52 " upper arches.
 B524 " " inside channel, showing deposits of lime.

ROMAN BRITAIN

- | | |
|-------|---|
| B151 | Bath, plan of Roman bath. |
| B154 | " view of large Roman bath prior to erection of modern building. |
| B661 | " " " (empty). |
| B662 | " " " " " |
| B323 | " part of cornice. (<i>Wiltshire County History, Stoneham</i> , i, fig. 12.) |
| B325 | " Corinthian capital and part of column, found in 1790. (<i>id.</i> i, fig. 13.) |
| B350 | " two pieces of shell mosaic. (<i>id.</i> i, fig. 15.) |
| B391 | " curved block of stone with carved patterns on both sides. (<i>id.</i> i, fig. 34.) |
| B393 | " carved fragment. (<i>id.</i> i, fig. 36.) |
| B2520 | Chester, plan of city showing city wall. |
| B2521 | " north wall, section. |
| B2518 | " " " " |
| B2509 | Stilchester, sketch plan (1884). |
| B2510 | " plans of houses (mural xx, xxi (1908). |
| B2522 | " hypocaust, plan and section (1887). |

INSCRIPTIONS.

- | | | |
|-------|---------------------|--|
| B196 | Heb. | Fragment of inscription, <i>VES VIIIO</i> . |
| B196 | " | Fragment of inscription, <i>CIL</i> vii, no. 24. |
| B197 | " | Fragment of inscription, <i>CIL</i> vii, no. 24c. |
| B198 | " | Fragment of inscription, <i>CIL</i> vii, no. 33c. |
| B2573 | Cirencester. | 'Arego' slab with acrostic inscription. |
| B36 | Colchester | Museum, altar to Solvian mother. |
| B399 | Rome, | Republican altar on Palatine hill (' <i>Sed deo cel deiras,</i> ' etc.). |
| B5503 | Timar. | inscription at <i>CIL</i> viii, 17837. |
| B5506 | " | inscription from market place of Sestus. |
| B5572 | " | inscription from the library. (Baltz, <i>Les epaves de Timgad</i> , p. 9.) |

EARLY ITALIAN ANTIQUITIES.

COPPER AGE (AENEOLITHIC PERIOD).

(Strained, chamois-colored.)

- B0033 Two typical inhumation graves at Remolillo, Brescia. (*Bull. Pol. It.* xxiv, pl. 2.)
 B0034 Provincia di Roma. Contents of the Scorguda tomb and copper axes from near Palestrina. (*Id.* pl. 15.)
 B0035 Vase from tomb of S. Cristina and objects of copper, tin and flint, from the cave of Monte Amboni and the Buca della Pace. (*Id.* xxv, pl. 3.)
 B0037 Stone and copper instruments, latium. (*Bull. Comm. Arch.* xxvi, pl. 3.)
 B0138 Daggers, arrowheads, nails, buttons, etc., of stone and copper, also pottery. From information tombs at Remolillo and Ornavasso. (Montelius, *Le civilisation primitive en Italie*, pl. 36.)
 B0040 Ornaments, dolmens of Sterracavallo and Micerrano. (*Bull. Pol. It.* xxv, pl. 6.)
 B0036 Painted pottery (Orsi's first Siculan period) from Prov. di Girgenti. (*Id.* xxiii, pl. 1.)
 B0030 Early incised pottery from near Cagliari (see xxv, pl. 17.)

BRONZE AGE (*Archaumet. chzealogically.*)

1. Western Lake Dwellings (Early Bronze Age.)

- B0027 Early pottery ('Palafitte') from Cremona and Brescia. (ib. xiii, pl. 3.)
B0103 Cells and other objects of stone, copper and earthenware. Early bronze age. From
'Palafitte' on Lake Varese. (Montelius, pl. 3.)

- B6036 Bronze daggers, etc. ("Palafitte") from Lombardy and Venice. (*Bull. Pol. It.* xix, pl. 6.)
 B6127 Daggers, celts, etc. Early bronze age. Found in *dépôt* in Po valley. (Montelius, pl. 27.)

2. Eastern Lake Dwellings and Terramare (Full Bronze Age).

(a) Terramare.

- B6031 Fontaurillat: plan of the Castellazzo terramara. (*Bull. Pol. It.* xiii, pl. 4.)
 B6112 Terramara of Castione del Marchesi: view, plan, and objects found. (Montelius, pl. 12.)
 B6114 " " " celts, daggers, swords, umbels, vessels, pottery. (*id.* pl. 14.)
 B6116 Terramara of Guzzano: pins, celts, daggers, "razors." (*id.* pl. 15.)
 B6118 " " pottery, including knobbed and furrowed ware, crescent handles, and *schekelle*. (*id.* pl. 15.)
 B6117 " " pottery, umbels, mouth, *rotelle*, etc. (*id.* pl. 17.)
 B6030 Terramara ware from Tarentum: knobbed handles. (*Bull. Pol. It.* xvi, pl. 2.)

(b) Lake Dwellings.

- B6106 Palafitte or Pesechera: bronze daggers. (Montelius, pl. 4.)
 B6107 " " " bronze pins. (*id.* pl. 7.)
 B6108 " " " bronze violin-bow fibulae, bracelets, and pendants. (*id.* pl. 8.)

(c) Terramara Cemeteries.

- B6130 Pottery from cremation tombs at Capomate and Crispellano. (*id.* pl. 39.)
 B6138 " " " Monte Lonato, Rovelloni and Cernusco. (*id.* pl. 32.)

(d) Swords and Isolated Finds.

- B6124 Sporadic finds of violin-bow fibulae, pins, celts, whorls, etc. from dwellings S. of Po. (*id.* pl. 24.)
 B6128 Daggers and celts of full bronze age, found in *dépôt* at Cascina Ranca (Milan). (*id.* pl. 25.)
 B6037 Swords found from Modena (Syracuse). (*Bull. Pol. It.* xvi, pl. 12.)

3. Hut Settlements of Terramara Period and Corresponding Tombs.

- B6111 Places of hut foundations with objects of terramara type. Po valley. (Montelius, pl. 11.)
 B6127 Swords, daggers, and pins of bronze, from foundations at Poregliano. (*id.* pl. 37.)
 B6020 Daggers and axes from isolated tomb (burial site uncertain) of early bronze age at Parco del Moncel. (*Bull. Pol. It.* xvi, pl. 1.)

TRANSITION TO IRON AGE (Arranged chronologically).

- B6141 Fibulae, pottery, and miscellanea from cremation tombs at Bismantova. (Montelius, pl. 41.)
 B6142 Arched bow fibulae, pins, pottery, etc., from cremation tombs at Momussa. (*id.* pl. 42.)

IRON AGE (Arranged geographically).

1. Villanova Group Proper.

- B6139 Villanova: bronze and iron axes, razor, and model celts from cremation graves. (*id.* pl. 36.)
 B6130 " " fibulae from cremation graves. (*id.* pl. 39.)
 B6131 " " pins, bronze and terracotta vessels from cremation graves. (*id.* pl. 31.)
 B6132 " " vases, some with stamped ornament, from cremation graves. (*id.* pl. 32.)
 B6133 " " vases, ossuaries, etc. from cremation graves. (*id.* pl. 33.)
 B6173 Bologna: Period Benacci I., bronze objects from cremation graves. (*id.* pl. 73.)
 B6172 " " " fibulae and pottery from cremation graves. (*id.* pl. 75.)
 B6176 " " " Benacci II.: objects in bronze and terracotta from cremation graves. (*id.* pl. 76.)

- B6178 Bologna: Period Venetian II: crescent mirrors, flame-shaped knives, etc. from cremation graves. (*id.* pl. 78.)
 B6185 " " Arnaldi: axes, mostly oesaries, from cremation graves. (*id.* pl. 85.)
 B6183 " " " fibulae from cremation graves. (*id.* pl. 83.)

2. Golasecca Group (N.W.).

- B6143 Golasecca: plans of cremation tombs and pottery therefrom. (*id.* pl. 43.)
 B6144 " " fibulae, jewels, etc. from cremation graves. (*id.* pl. 44.)
 B6145 Castellotto Ticino: pottery and metalwork from cremation tombs. (*id.* pl. 45.)

3. Atestine Group.

- B6150 Este Period I: fibulae and pottery from cremation tombs. (*id.* pl. 50.)
 B6151 " " Period II: fibulae and other bronze objects from cremation tombs. (*id.* pl. 51.)
 B6152 " " " pottery and bronze objects, including belt with incised spiral design, from cremation graves. (*id.* pl. 52.)
 B6153 " " " pottery from cremation graves. (*id.* pl. 53.)
 B6154 " " Period III: Barrovi tomb. Figured stela and other bronze objects. (*id.* pl. 54.)
 B6155 " " " figured stela and other objects of bronze from cremation tombs. (*id.* pl. 55.)
 B6156 " " " iron axes and pashed and repousse work in bronze from cremation tombs. (*id.* pl. 56.)
 B6157 " " " pottery (red and black band, and call-studded wares) from cremation tombs. (*id.* pl. 57.)
 B6158 " " Periods III, IV: fibulae and pottery from graves and temple. (*id.* pl. 58.)
 B6149 Oppesino and other sites north of the Po: fibulae and figured metal work. (*id.* pl. 49.)

4. Latian Group.

- B2918 Albani Hills: pottery from earliest iron age tombs: Villanova cemetery. (*Bull. Comm. Arch.* xxi. pl. 6.)
 B2919 Huturna, rough pottery, painted ware, *Conthlas* vase, early fibulae, from tombs of very various dates (*id.* pl. 7.)
 B2920 Pottery of the earliest period and later (two ornaments, bifurcate handles, etc.), 2 figures of the god *Bes* (*id.* pl. 8.)

5. Tuscan Group.

- B2921 Various periods: bronze fibulae, iron swords, head necklaces, etc. (*id.* pl. 9.)
 B2922 Narni: types of tomb and of masonry (*Monumenti Antichi*, II).
 B2927 " " bronze fibulae (arched bow, hooked-backed, leaf types). (*id.*)
 B2924 " " pottery (frustures, mixed and fluted) from advanced iron age tombs. (*id.*)
 B2923 " " pottery of advanced type, early local painted wares. (*id.*)
 B2928 " " bronze vessels and tripods with repousse work. Advanced iron age. (*id.*)
 B2954 Vulci: painted pottery: local imitations of Sub-Mycenaean and Greek geometric wares. (*Giell.* pl. 1.)
 B2953 " " fine vases of fluted and incised *becchiere*. (*Giell.* pl. 3.)
 B2926 Vulturne: figured bronze disc (*Bull. Pol. It.* xvii. pl. 15.)
 B2941 Orvieto: bronze vase of Villanova type. (*id.* xviii. pl. 251.)

6. S. Italian Group.

- B2928 Salerno Valley, Campania: pottery plain (askoid types) and painted, from inhumation graves. (*id.* xvii. pl. 4.)

ARCHITECTURAL DETAILS.

- B390 **Barcelona**, fragment of frieze, found in old walling.
 B390 " capital of Roman temple.
 B183 **Bath**, fragments of cornice with grotesque head.
 B186 " fragment of carved stone.
 B142 " fragments of cornice.
 B184 " Corinthian capital forming part of attached column.
 B185 " head of Medusa, conjectural restoration of pediment.
 B341 **Tarragona**, frieze in Italian marble.
 B335 " " " (found 1815).
 B336 " capitals found at.
 B334 " capital from temple of Jupiter.

SCULPTURE.

MYTHOLOGY IN LATER ART.

- B363 **Asclepius**, white marble statue of Aesculapius from Empuries. *Barcelona Mus.*
 B344 **Dionysus**, Parian marble statue of Bacchus. *Tarragona Mus.*
 B333 **Heracles**, white marble torso found 1839. *Tarragona.*
 B555 **Nike**, Athens Nike from Ostia. (*J.R.S.* ii. pl. 11.)
 B554 " " " " side view. (*ibid.* pl. 12.)

Hellenistic Relief.

- B7343 **Peneus and Andromeda**. (Schweizer, *Kunstblätter*, pl. 12.)

ROMAN HISTORICAL RELIEFS.

The Column of Trajan.

This list, enlarged, corrected and more conveniently numbered, replaces that of the original catalogue. Slides can be ordered by quoting either the numbers here given or those in the original catalogue, but the numbering here given is to be preferred.

Complete series, each slide being given from one plate of Ulpianus, Trajanianus.

Plate.	Section.	
B1504	I	1-4. Rhodanus on the Danube.
B1505	Y	5-8. Romans on guard, boat with oars.
B1506	VI	9-11. Frontier town, figure of river-god.
B1507	vii	12-13. Bridge of boats crossed by Roman army.
B1508	viii	14-18. Landing of troops on north bank.
B1509	ix	19-22. Council of war, advance of cavalry.
B1510	x	23-26. Lustralis exercitum, arrival of messenger.
B1511	xi	27-30. Allobroges, building of fort.
B1512	xii	31-34. Building continued.
B1513	xiii	35-38. Passage of river, clearing of forest.
B1514	xiv	39-42. Fortification of a river-crossing.
B1515	xv	43-46. Dacian prisoner, building of fort.
B1516	xvi	47-50. Cavalry crossing river.
B1517	xvii	51-54. } Advance of army through forest.
B1518	xviii	55-58. }
B1519	xix	59-62. Battle scene.
B1520	xx	63-66. Dacian fortifications, passage of river.
B1521	xxi	67-70. Allobroges, Dacian embassy.

	Plate.	Section.	
B1522	xxii	71-73	Romans pillaging, captive princesses.
B1523	xxiii	74-76	Cavalry armuring, mailed horsemen.
B1524	xxiv	77-79	Dacians attack Roman fort.
B1525	xxv	80-83	Trajan embarks at Drobeta.
B1526	xxvi	84-87	Voyage on Danube.
B1527	xxvii	88-91	March of army.
B1528	xxviii	92-94	Engagement with mailed horsemen.
B1529	xxix	95-98	Night battle.
B1530	xxx	99-102	Dacian captives brought in.
B1531	xxxi	103-106	Battle scene, rout of Dacians.
B1532	xxxii	107-110	
B1533	xxxiii	111-114	Alloetio, Dacian prisoners in fort.
B1534	xxxiv	115-118	Soldiers rewarded, Roman prisoners tortured by Dacian women.
B1535	xxxv	119-122	Embarkation of Trajan, passage of river.
B1536	xxxvi	123-126	Army on the march, received by Trajan.
B1537	xxxvii	127-130	Trajan in camp.
B1538	xxxviii	131-134	Lustratio exercitus.
B1539	xxxix	135-138	Alloetio, clearing of forest.
B1540	xl	139-141	March across mountains.
B1541	xli	142-144	
B1542	xlii	145-148	Building of fort, Dacian ambassador.
B1543	xliii	149-152	Operations in mountains.
B1544	xliiv	153-156	
B1545	xli v	157-160	Mounted cavalry fight with Dacians.
B1546	xli vi	161-164	Siege works and artillery, slingers in action.
B1547	xli vii	165-168	
B1548	xli viii	169-172	Operations by Dacians.
B1549	xli x	173-176	Clearing of forest, prisoner brought to Trajan.
B1550	l	177-180	Irregular troops in action (Palmyrenes, etc.).
B1551	ii	181-184	Attack by ambulo, heads brought to Trajan.
B1552	iii	185-188	Battle scene.
B1553	iiii	189-192	Alloetio, Romans at spring.
B1554	lv	193-196	Submission of Dacians.
B1555	lv	197-199	
B1556	lvi	200-203	Migration of Dacians, alloetio.
B1557	lvii	204-206	Victory with trophy.
B1558	lviii	207-210	Trajan embarks at Ancona and crosses Adriatic.
B1559	lix	211-213	
B1560	lx	214-216	Trajan at Iader (Zara).
B1561	lxi	217-220	Trajan leaving Iader.
B1562	lxii	221-223	Trajan visits a Roman camp (Barrova).
B1563	lxiii	225-228	Trajan at Salona.
B1564	lxiv	229-232	Trajan disembarks on the Adriatic coast.
B1565	lxv	233-236	Trajan's march, finally Dacians (Thermidus).
B1566	lxvi	237-240	Sacrifice at six altars.
B1567	lxvii	241-244	Chasoun clearing forest.
B1568	lxviii	245-248	Dacian movement, Decubalus in camp.
B1569	lxix	249-251	Dacians attack Roman camp.
B1570	lxx	252-254	Arrival of relieving force under Trajan.
B1571	lxxi	255-257	Chasoun at work.
B1572	lxxii	258-261	Trajan at the bridge.
B1573	lxxiii	262-264	Trajan receiving embassies at Drobeta.
B1574	lxxiv	265-267	Trajan on the march.
B1575	lxxv	268-270	Lustratio exercitus.
B1576	lxxvi	271-273	
B1577	lxxvii	274-276	Alloetio.
B1578	lxxviii	278-281	Council of war, advance begun.

	Plate.	Section.	
B1579	lxxix	282-285.	Columns adorning.
B1580	lxxx	286-289.	
B1581	lxxx	290-293.	Fort-building and reaping.
B1582	lxxxii	294-297.	Pauc in Dacian town (Sarmisegethus).
B1583	lxxxiii	298-301.	Aurilla attack Dacians, Emperor's headquarters.
B1584	lxxxiv	302-305.	Assault on Sarmisegethus.
B1585	lxxxv	306-309.	Army and siege-engines before town.
B1586	lxxxvi	310-312.	Progress of siege, assaults on town.
B1587	lxxxvii	313-315.	
B1588	lxxxviii	316-318.	
B1589	lxxxix	319-322.	Dacians submit.
B1590	xc	323-325.	Town set on fire.
B1591	xci	326-329.	Self-destruction of defenders by poison.
B1592	xcii	330-333.	Dacians leaving town.
B1593	xciii	334-337.	Trajan receives submission of Dacians.
B1594	xciv	338-341.	Occupation and plundering of Sarmisegethus.
B1595	xcv	342-345.	Operations in forest and mountains.
B1596	xcvi	346-349.	
B1597	xcvii	350-353.	Auxiliaries crossing river.
B1598	xcviii	354-357.	Withdrawal of Dacians.
B1599	xcix	358-361.	Dacians attack Roman fort, Decebalus.
B1600	c	362-365.	Flying Dacians, silence by Trajan.
B1601	ci	366-369.	Treasure carried off by Romans.
B1602	cii	370-373.	Dacians in retreat.
B1603	ciii	374-377.	Trajan receives submission of Dacians.
B1604	civ	378-379.	Parade by Roman cavalry and attack of Decebalus.
B1605	cv	380-383.	
B1606	cvi	384-387.	
B1607	cvi	388-390.	Children captured.
B1608	cvi	391-394.	Head of Decebalus exhibited.
B1609	cix	395-398.	Prisoners taken in mountains.
B1610	cx	399-402.	Moon-goddess, attack on Dacian settlements.
B1611	cxii	403-406.	Dacian settlements burnt.
B1612	cxii	407-410.	Migration of Dacians with flocks and herds.
B1613	cxiii	411-414.	

Novellianus selection of slides, each of which embraces more than one plate of Othertius, Trajanensis. The descriptions may be taken from the complete series given above.

	Plate.	Section.		Plate.	Section.
B5370	vi, vii, viii	6-17.	B5322	xlvi, xlvii	183-172.
B5383	viii, ix	18-21.	B5353	i, ii	177-181.
B5347	ix, x	22-26.	B5348	ii, iii	182-188.
B5323	xiv, xv	39-46.	B5349	liv, lv	192-199.
B5321	xviii, xix	55-62.	B5358	lviii, lix	207-218.
B5350	xxi, xxii	103-110.	B5345	lxxiii, lxxiv, lxxv	298-308.
B5336	xxv, xxvi	115-122.	B5340	lxxvi, lxxvii	309-315.
B5384	xxix, xl	125-140.	B5367	xcvi, xcvi	388-394.
B5361	xl, xli	141-144.	B5352	cxii, cxiii	407-414.
B5354	xli, xli	145-160.			

ROMAN SARCOPHAGI.

B323	Marcus sarcophagus in church at Agut.
B331	" " " " in Barcelona Mus. and view.
B332	" " " " " " view of one side.
B335	" " " " " " Rape of Proserpine. Tarragona Mus.
B370	" " " " " " portion of. Formerly in Tarragona Mus.
B519	" " " " " " Rape of Proserpine (?). Annals.

BYZANTINE SARCOPHAGI. 632

- B535 Stenoplagus in church of S. Appollinare in Classe, Ravenna, front view, peacock design.
B536 " " " " " " end view, peacock design.
B540 Transenna in cloister of S. Appollinare Nuovo, Ravenna, with peacock and fruit design.

ROMANO-BRITISH SCULPTURE

- | | |
|------|---|
| B383 | Head of Medusa from temple of Sol Minerva (<i>Putnam County History, Somerset, V.</i>
<i>fig. 11</i>). Bath Mus. |
| B387 | Head of moon-goddess (<i>ibid.</i> I, <i>fig. 20</i>). Bath Mus. |
| B388 | Relief of Heracles Bötux (<i>ibid.</i> I, <i>fig. 32</i>). " |
| B389 | Relief of goddess and worshippers (<i>ibid.</i> I, <i>fig. 33</i>). Bath Mus. |
| B390 | Relief of Minerva (<i>ibid.</i> I, <i>fig. 34</i>). Bath Mus. |
| B392 | Carved stone found c. 1879 (<i>ibid.</i> I, <i>fig. 36</i>). Bath Mus. |
| B395 | Colossal head of Flavian epoch, front view (<i>ibid.</i> I, <i>fig. 82</i>). Bath Mus. |
| B396 | " " " " back view (<i>ibid.</i> I, <i>fig. 82</i>). " |
| B397 | Three-quarter length ephthalral relief of a civilian standing in a niche, found 1799
Bath Mus. |
| B400 | Fragment of panel representing one of the four seasons, found 1895. Bath Mus. |
| B200 | Fragmentary ephthalral relief of standard-bearer (7), found c. 1205. " |

ROMANO-GERMAN · SCULPTURE

- | | | |
|------|---------------------------|-----------------------------|
| B879 | Cn. Musius, lieutenant of | Major Mor. |
| B880 | Vellauna, | Count, Privatus. |
| B881 | Annatus, | Ringstrick, Kuchensch. Wao. |
| B882 | M. Val. Crispus, | Wiesbaden Mus. |

ROMAN SCULPTURE IN SPAIN.

- B307 White marble medallion from seminary at Tarragona.
B308 Draped female figure found 1918 in baths at Tarragona (fine example of a Hellenistic, or earlier, tradition with good Roman workmanship.)
B309 Draped female figure, later in date.
B310 Torso of goddess (Flora?), Tarragona Mus.
B311 Traced statue of youth wearing tulla. Tarragona Mus.

PORTRAITS.

- E340 **Aurelius, Marcus.** Head in grey marble found in a Roman well at Tarragona.
E341 **Caligula (?)**, bronze bust of, base inlaid with silver, Culebrieta Mus.
E342 **Hadrian;** white marble head, Tarragona.
E361 **Verus, L.** Italian marble head, Tarragona Mus.
E352 **Salina,** wife of Hadrian (?), statue with attributes of Ceres (J.R.S. II, pl. xiii).
E343 **Trajan;** Italian marble head, Tarragona.
E365 Imperial portrait head from Italy, Tortona Mus.
E389 " " " " " "
E367 White marble male portrait head, Mataró Mus.
E366 Idealized female portrait head in white marble, Mataró Mus.

BRONZES.

- B192 Head of a goddess (Minerva) Bath Mus., full face view.
B193 " " " profile view.

TERRACOTTAS.

- B320 Roman figurines from children's graves: grotesque statuettes. Corchester. Min.

VASES.

- | | |
|------|---|
| B189 | Fragments of Samian ware, Bath Mus. |
| B29 | 'Smith vase,' Jarman Collection, Colchester Mus. |
| B30 | Pottery in Joslin collection, Colchester Mus. |
| B31 | Face urns, Colchester Mus. |
| B32 | Child-burial, middle first cent. A.D., found near Colchester, Colchester Mus. |
| B357 | Burial group, Colchester Mus. |
| B359 | Amphora containing burial, Colchester Mus. |
| B360 | Honey-pot of buff ware, Colchester Mus. |
| B317 | Late-Celtic amphora from Lexden Park House. Colchester Mus. |
| B37 | Amphora stamps in Colchester Mus. |
| B38 | |

PAINTINGS.

- | | | | | | |
|------|--|----|----|----|---------------------------|
| B555 | Pompeii, part of wall painting in the Villa Irena (J. & S. III, pl. viii). | | | | |
| B559 | 11 | 11 | 11 | 11 | (<i>int.</i> pl. ix). |
| B560 | 11 | 11 | 11 | 11 | (<i>int.</i> pl. xi). |
| B581 | 11 | 11 | 11 | 11 | (<i>int.</i> pl. xix). |
| B582 | 11 | 11 | 11 | 11 | (<i>int.</i> pl. xiii). |
| B583 | 11 | 11 | 11 | 11 | (<i>int.</i> pl. xiiii). |

MOSAICS.

- | | | | | |
|--------------------------|--|----------------|-----|------------------------------|
| B285 | Barcelona, mosaic. | | | |
| B2570 | El Djem, mosaic from. | Barde Mus. | | |
| B344 | Empuries, mosaic of Sacrifice of Iphigenia. | | | |
| B257 | Ostia, mosaics of earlier period found under street opposite barracks of <i>Vigilae</i> (J.R.S.
ii, fig. 23). | | | |
| B2549 | Ondra, mosaic from. | Barde Mus. | | |
| B2540 | Silchester, mosaic compared with mosaic at Pompeii. | | | |
| B2548 | Tsharka, mosaic from. | Barde Mus. | | |
| B2547 | " " | " " | | |
| B346 | Tarragona, mosaic. | Tarragona Mus. | | |
| B531 | Tivoli, Hadrian's Villa, mosaic in cell of hospital. | | | |
| <i>Byzantine Mosaics</i> | | | | |
| B587 | Ravenna, S. Apollinare Nuovo, Mosaics over arcade of N. Nave. | | | Adoration of Magi. |
| B588 | " " | " " | " " | Virgin. |
| B590 | " " | " " | " " | S. Nave: Prophets and Palace |

COINS.

- B180 Roman, *H.* Early currency.
 B191 Palladium, 44 a.d. Type showing Roma.

MINOR ARTS.

- B186 Ornam. bangles, rings, pins, etc. Bath Mus.
 B202 Bronze dagger, Colchester Mus.
 B191 Impressions of gems found in 1898. Bath Mus.
 B167 Potter vessels from dipping well. Bath Mus.
 B198 " " " " " "
 B214 Romano-British jewellery and other objects from cemetery on North Station Road
 Colchester. Colchester Mus.
 B235 Bone pins, Colchester Mus.

MISCELLANEA.

- B554 Group of ladies' feeding-bottles, Colchester Mus.
 B2542 Padlock found at Silchester, 1898.
 B2547 Barrelling found at Silchester.
 B2552 Quern found at Silchester.
 B2527 Tin ingot found in Cornwall.
 B394 Lead pig of Hadrian. (*Victoria County History, Somerset*, i. fig. 42). Bath Mus.

NOTICE TO CONTRIBUTORS.

THE Council of the Hellenic Society having decided that it is desirable for a common system of transliteration of Greek words to be adopted in the *Journal of Hellenic Studies*, the following scheme has been drawn up by the Acting Editorial Committee in conjunction with the Consultative Editorial Committee, and has received the approval of the Council.

In consideration of the literary traditions of English scholarship, the scheme is of the nature of a compromise, and in most cases considerable latitude of usage is to be allowed.

(1) All Greek proper names should be transliterated into the Latin alphabet according to the practice of educated Romans of the Augustan age. Thus κ should be represented by *c*, the vowels and diphthongs *e*, *ai*, *oi*, *ou* by *y*, *ae*, *oe*, and *u* respectively, final *-et* and *-ev* by *-us* and *-um*, and *-pos* by *-er*.

But in the case of the diphthong *ei* it is felt that *ei* is more suitable than *e* or *i*, although in names like *Laodicea Alexandria*, where they are consecrated by usage, *e* or *i* should be preserved, also words ending in *-eios* must be represented by *-eum*.

A certain amount of discretion must be allowed in using the *o* terminations, especially where the Latin usage itself varies or prefers the *o* form, as *Delos*. Similarly Latin usage should be followed as far as possible in *-e* and *-u* terminations, e.g., *Prison Smyrna*. In some of the more obscure names ending in *-pos*, as *Alaypos*, *-er* should be avoided, as likely to lead to confusion. The Greek form *-on* is to be preferred to *-o* for names like *Dion*, *Hieron*, except in a name so common as *Apollo*, where it would be pedantic.

Names which have acquired a definite English form, such as *Corinth*, *Athens*, should of course not be otherwise represented. It is hardly necessary to point out that forms like *Hercules*, *Mercury*, *Minerva*, should not be used for *Heracles*, *Hermes*, and *Athena*.

(2) Although names of the gods should be transliterated in the same way as other proper names, names of personifications and epithets such as *Nike*, *Homonómia*, *Hyakinthios*, should fall under § 4.

(3) In no case should accents, especially the circumflex, be written over vowels to show quantity.

(4) In the case of Greek words other than proper names, used as names of personifications or technical terms, the Greek form should be transliterated letter for letter, *k* being used for *κ*, *ch* for *χ*, but *y* and *e* being substituted for *υ* and *ου*, which are misleading in English, e.g. *Nike*, *apoxyomenos*, *Hindymeneos*, *chytos*.

This rule should not be rigidly enforced in the case of Greek words in common English use, such as *aegis*, *symposium*. It is also necessary to preserve the use of *ou* for *ου* in a certain number of words in which it has become almost universal, such as *boule*, *gerousia*.

(5) The Acting Editorial Committee are authorised to correct all MSS. and proofs in accordance with this scheme, except in the case of a special protest from a contributor. All contributors, therefore, who object on principle to the system approved by the Council, are requested to inform the Editors of the fact when forwarding contributions to the Journal.

In addition to the above system of transliteration, contributors to the *Journal of Hellenic Studies* are requested, as far as possible, to adhere to the following conventions:—

Quotations from Ancient and Modern Authorities.

Names of authors should not be underlined; titles of books, articles, periodicals, or other collective publications should be underlined (for italics). If the title of an article is quoted as well as the publication in which it is contained, the latter should be bracketed. Thus:

Six, *Jahrb.* xviii. 1903, p. 34.

or—

Six, *Protagoras* (*Jahrb.* xviii. 1903), p. 34.

But as a rule the shorter form of citation is to be preferred.

The number of the edition, when necessary, should be indicated by a small figure above the line; e.g. *Dittenb. Syll.*² 123.

- Niese = Niese, Geschichte der griechischen u. makedonischen Staaten.
Num. Chr. = Numismatic Chronicle.
Num. Zst. = Numismatische Zeitschrift.
 Pauly-Wissowa = Pauly-Wissowa, Real-Encyclopädie der classischen Altertumswissenschaft.
Philol. = Philologus.
 Ramsay, *C. B.* = Ramsay, Cities and Bishops of Phrygia.
 Ramsay, *Hist. Geog.* = Ramsay, Historical Geography of Asia Minor.
 Reinach, *Rép. Sculpt.* = S. Reinach, Répertoire des Sculptures.
 Reinach, *Rép. Vases* = S. Reinach, Répertoire des Vases peints.
Rev. Arch. = Revue Archéologique.
Rev. Ét. Gr. = Revue des Études Grecques.
Rev. Num. = Revue Numismatique.
Rev. Philol. = Revue de Philologie.
Rh. Mus. = Rheinisches Museum.
Rom. Mitt. = Mittheilungen des Deutschen Archäologischen Instituts, Römische Abteilung.
 Roscher = Roscher, Lexicon der Mythologie.
S.M.C. = Sparta Museum Catalogue.
T.A.M. = Tituli Asiae Minoris.
Z. f. N. = Zeitschrift für Numismatik.

Transliteration of Inscriptions.

- [] Square brackets to indicate additions, i.e. a lacuna filled by conjecture.
 () Curved brackets to indicate alterations, i.e. (1) the resolution of an abbreviation or symbol; (2) letters misrepresented by the engraver; (3) letters wrongly omitted by the engraver; (4) mistakes of the copyist.
 < > Angular brackets to indicate omissions, i.e. to enclose superfluous letters appearing on the original.
 . . . Dots to represent an unfilled lacuna when the exact number of missing letters is known.
 - - - Dashes for the same purpose, when the number of missing letters is not known.
 Uncertain letters should have dots under them.
 Where the original has iota adscript, it should be reproduced in that form; otherwise it should be supplied as subscript.
 The aspirate, if it appears in the original, should be represented by a special sign, ¹.

Quotations from MSS and Literary Texts.

- The same conventions should be employed for this purpose as for inscriptions, with the following *important exceptions*:—
 () Curved brackets to indicate only the resolution of an abbreviation or symbol.
 [] Double square brackets to enclose superfluous letters appearing on the original.
 < > Angular brackets to enclose letters supplying an omission in the original.

The Editors desire to impress upon contributors the necessity of clearly and accurately indicating accents and breathings, as the neglect of this precaution adds very considerably to the cost of production of the *Journal*.

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INSCRIPTIONS FROM LYCIA

THE following inscriptions were copied on a journey made in April and May, 1911, in Lycia. We were accompanied throughout by Mr. Nikola Michael Ferteklis of Adaha, to whom our best thanks are due. We have also to acknowledge assistance from Mr. Tod and Mr. Woodward in the publication of the texts, and from Mr. Arkwright in the interpretation of the Lycian fragment from the Fellendagh (No. 29), and with certain of the names. Our other obligations are noted in their place. An accident to one of our horses, while we were crossing the Xanthus marshes on the way to Patara, damaged a great part of our squeeze paper and we have had in a number of cases to rely only on our copies. It has seemed better therefore to state the cases where we had an impression, and where we had only a copy on which to rely.

1. Makri (Telmessos). In the house of Mr. Louissides. Above the inscription is a rude relief of a horseman riding to the left. Letters 012. Copy.

ΘΕΩΚΑΚΑΣΙ ΩΛΠΟΛ
ΛΩΝΙΟΕΥΧΗΝ

Θεῶ Κακασ[Σ]ῶ Ἀπολ-
λώνιος εὐχῆν.

A similar relief and dedication to Kakasbos is figured by Petersen¹ from Lovisi, a second also is known at Rhodes.² For the god Kakasbos see Drexler in Roscher, s.v. and *Arch. Ep. Mitt.* xiii. p. 124. Mr. Hill connects the divinity with the θεὸς σώζων.³ A similar relief published by van Buren from Makri is explained as the representation of the heroized dead.⁴ On the subject of this identification of the dead man with the divine nature, see further Ramsay, *C.B.* i. 100, and *J.H.S.* 1884, p. 261.

2. *Ib.* Below a similar relief. Letters 015. Copy.

ΜΟΝΙΔΗΣ Ε Ο ΙΔΟΥ
Ι ΥΧΗΝ

Μονίδης [Μ]δ[υ]δου
εὐχῆν.

¹ *Reisen in Lykien*, ii. p. 3, Fig. 2, No. 7.

² Locoy, *Arch. Ep. Mitt.* vii. p. 124.

³ *J.H.S.* xv. p. 128. In *C.B.* i. p. 305 the H.S.—VOL. XXXIV.

names Μῆγας and Κακασβίς occur as priest and priestess of Demeter and Salutaris.

⁴ *J.H.S.* xxviii. p. 181, Fig. 1.

3. *Ib.* Broken block built into a wall behind the Tekke. H. 26, B. 725. Letters ca. 02. Copy.

ΣΥΛΑΣΑΤΟΗΡΩΝΕΜΑΥΤΩ
ΝΤΩΡΟΔΙΝΗΝΤΗΝΗΛΕΥΘΕΡΩΜΕ
ΝΕΥΦΡΟΣΥΝΗΝΕΥΤΥΧΕΟΥΣΤΟΥΕΛΠΙΟΔ
ΚΕΚΙΑΥΔΙΑΝΦΟΡΓΙΔΑΤΗ

5 ΕΛΦΙΝΡΟΔΙΝΗΕΤ ΡΩΔΕ ΥΔΕΝΙΕΣΟΝΕΣ
ΡΩΤΑΤΩΤΑΜΕΙΩΧΦΩΝΟΕΛΕΝΣΑΚΤΟ

- - - κατεσκεύασα τὸ ἥρπον ἐμαντῶ - - -
- - - - - πτω 'Ροδίην τὴν ἡλευθέρωμέην - - -
- - - - - ἢν Εὐφροσύνην Εὐτυχέους τοῦ Ἐλπιῶδ - - -
- - - - - καὶ Κ[λ]αυδίαν Φοργίδα τῆν - - -
5 - - - - - ἀδ[ελφ]ῆν 'Ροδίην(ε)· ἐτ[ε]ρῶν δὲ [ο]ὕδεσι ἔξω ἔσται θάψαι·
- - - τῇ ἱερωτάτῃ ταμίᾳ (δηνάρια) φ', ὧν ὁ ἐλάνθας τὰ - - -

The stone is broken at both ends so that a complete restoration is impossible. The name 'Ροδίη occurs in a Christian inscription, *C.I.G.* 9484, cf. 'Ροδία (also a *liberta*) in Thessaly (*I.G.* ix, 2, 1042, l. 48) and Bechtel-Fick, *Gr. Personennamen*, p. 248. In line 5 the final ε of 'Ροδίνης has been omitted by the stone-cutter before the following ε.

4. *Ib.* Square statue-base in the bank of a water-channel, thirty minutes from the bridge at Makri on the road to Dent. The base lies on its side, the lower edge being submerged. H. 86. Letters 05. Copy.

ΔΙΟΛΥΜ

ΤΙΩΦΛΑΒ

ΣΑΤΤΑ

ΥΟΣΥΠΕΙ

5 ΨΕΝΚΤΗ

ΕΟΣΤΩΙ

ΩΡΙΩΝ

Δι' Ὀλυμ-

πίου Φλάβι-

ου Σαττα-

λίου ὑπείρ

τῆς ἐκτῆς

στοῦ (sic) τοῦ

χωρίου.

Flavius Attalus is presumably a stranger to whom the right of holding property in a foreign town has been granted. *Uf.* Dittenberger, *O.G.I.* 81, εἶναι δὲ αὐτοῖς ἰσοτέλειαν καὶ ἀσφάλειαν καὶ ἀσυλίαν . . . καὶ ἐκτῆσιν γῆς καὶ οἰκίας.

For the spelling ἐκτῆστος see Kalinka, *Brannos Vindobouensis* (1893), p. 86, n. 1, and Meisterhans-Schwyzler, *Grammatik der Att. Inschr.* p. 140, note 1216.

5. *Pinsra.* Round base built upside down into a building of Roman date to the S. E. of the acropolis; only a part of the inscription was visible. Finely cut letters, 175. Copy.

ΔΙΚΑΙΟΣΥΝΗΣΚΑΙΤΥΧΗΣ
 ΙΣΟΝΟΣΤΟΥΙΑΣΟΝΟΣ
 ΤΟΥΠΙΓΡΕΟΥΣ
 ΚΑΙΤΟΙΕΡΟΝΤΟΥΑΠΟΛΛΩΝΟΣ
 5 Ν ΑΓΑΛΜΑΤΑΑΝΑΤΕΘΕΙΚΟΤΟΣ

Ἐπεὶ τῆς] δικαιοσύνης καὶ τύχης
 Ἰά]σονος τοῦ Ἰάσονος
 τοῦ Πιγρέου
 - - - - καὶ τὸ ἱερόν τοῦ Ἀπόλλωνος
 5 Ν [καὶ] ἀγάλματα ἀνατεθεικότος.

The last line is probably to be restored: καὶ τὰ ἐν[τός] ἀγάλματα, or possibly καὶ ξόανον [καὶ] ἀγάλματα ἀνατεθεικότος. Cf. Sterrett, *Wolfe Expedition*, No. 422, τὸν ναὸν ἐκ [θεμελίων] σὺν τῷ ξοάνῳ καὶ τοῖς ἀγάλμασι ἐκ τῶν ἰδίων ἀνέθηκε (at Kara Baulo). The restorations suggested would make the last line exceed the first in length on the left side, which was probably the case with the two last lines, which are both longer on the right.

6. Kestep, a village 1½ hrs. from Minara on the road to Sidyma. Small square base. H. 25; B. 14. Letters 015. Copy.

ΑΛΛΑ
 ΦΙΛΦΝΩ
 ΦΙΛΣ
 ΑΤΟΝΕ
 5 ΑΥΤΗΣΠΑ
 ΤΕΡΑ
 ΗΡΦ Α

Λάλλα
 Φίλωνος
 Φίλων
 α τὸν [ἐ-
 αὐτῆς πα-
 τέρα
 ἥρωα.

7. Sidyma. Small square base. Above the inscription is the figure of a boy, of poor work; on one side of the stone is carved a pair of hands. H. 75, B. 27. Letters 02. Copy.

ΧΡΥΣΙΠΠΟΣΖΩ
 ΣΙΜΟΥΔΙΣΦΡΟ
 ΝΙΜΟΝΤΟΝ
 ΓΛΥΚΥΤΑΤΟΝ
 5 ΥΙΟΝΜΝΕΙΑΣ
 ΧΑΡΙΝΗΡΩΑ

Χρύσιππος Ζω-
 σίμου δις Φρό-
 νιμον τὸν
 γλυκύτατον
 υἱὸν μνείας
 χάριν ἥρωα.

For the hands carved on the side of the base see Woodward, *B.S.A.* xviii. p. 155, and the references there given.

8. *Ib.* Large square base with top broken. H. 1.23, B. .64. Letters .045 (last line .06). Copy.

ΕΠ ΑΓΑΘΟ	Ἐπαγαθ[ος β' Σι·
ΔΥ ΜΕΥΣΕΑ	δυμείν ἐα[ντῷ
ΚΑ ΙΓΥΝΑΙΚΙΑΥΤΟΥ	καὶ γυναίαι αὐτοῦ
ΑΡ ΣΑΣΕΙ////////ΓΗ////ΚΑΙ	Ἀρσάσει [τῇ] καὶ
5 ΜΙ ΘΚΑΛΛΙΜΗΔΟΥ	Μίῳ Καλλιμ[ῆ]δου
ΚΑΙ ΤΕΚΝΟΙΣΣΕΠΑ	καὶ τέκνοις Ἐπα-
ΓΑ ΘΩ ΚΑΙ ΑΓΑΘΟ	γάθῳ [γ'] καὶ Ἀγαθ[ῇ]
ΤΥΧΗΤΗΚΑΙ ΑΡΣΑ	Τύχῃ τῇ καὶ Ἀρσά-
ΣΕ ΙΕΠΑΓΑΘΟΥ	σει Ἐπαγάθου
10 ΗΡΩΣΙΝ	Ἡρώσιν.

Near the left-hand edge of the stone a crack runs the whole length, which obviously existed before the stone was engraved. In line 4 the most probable restoration is that suggested above, cf. *C.I.G.* 4264, and below, No. 10. In that case it is necessary to suppose that there was a flaw in the stone on either side of the letters TH.

In l. 7 we should probably read Ἐπαγάθῳ [γ'] to fill the space. Cf. *C.I.G.* 4264, Ἐπαγάθῳ τρις. The persons mentioned are discussed below, under No. 10.

Close to the village of Bel, which lies a little more than an hour to the S.W. of Sidyma, are the remains of a small site at the head of a ravine which opens on to the sea to the W. of the mediæval ruins marked in Kiepert's map. There are a few worked blocks in the village cemetery, and ten minutes to the S.E. of the village are the remains of ancient buildings with two rock-tombs near by. There was probably a small village site here in antiquity within the territory of Sidyma. The three following inscriptions are all from the site.

9. Bel. On a small Lycian rock-tomb. The inscription is engraved below the round beam ends. Letters .02. Copy and impression.

1.58

↑ ΜΑΜΙΟΝ ΛΑΒΟΥ ΚΑΙ ΑΡΙΣΤΟΤΕΛΗΣ ΔΑΙΔΑΛΟΥ ΣΙΔΥΜΕΙΣ ΚΑΤΕΣΚΕΥΑΣΑΝ
 ΤΟ ΜΗΜΕΙΟΝ ΛΑ Τῷ ΠΑΤΡΙ ΚΑΙ ΠΕΝΘΕΡῶ ΚΑΙ ΝΑΝῃ Τῇ ΜΑΜΙΟΥ
 ΜΗΤΡΙ ΔΕ ΚΑΙ ΤΟ ΖΕΞΗΜΩΝ ΓΕΓΕΝΗΜΕΝΟΙΣ ΑΛΛΩ ΔΕ ΜΗΔΕΙ
 ΕΞ ΑΙΤΤῶ ΝΑΙ ΕΙΔΕΜΗΝΟΦΕΙΛΗΣ ΠΕΡ' ΑΣΑΡΤΕΜΙΔΙΣΙΔΥΜΙΚῇ
 ↓ ΔΡΑΧΜΑΣ ΤΡΙΣ ΧΕΙΛΙΑΣ

Μάμιον Λάβου καὶ Ἀριστοτέλῃς Δαϊδάλου Σιδυμεῖς κατεσκεύασαν
 τὸ μνημεῖον αὐ[τῶν] τῷ πατρὶ καὶ πενθέρῳ καὶ Νάνῃ τῇ Μάμιου
 μητρὶ καὶ τοῖς ἐξ ἡμῶν γεγενημένοις· ἄλλῳ δὲ μηδενὶ
 ἐξ [ἐστίαι τεθῆναι]· εἰ δὲ μή, ὀφειλήσιν ἱερὰς Ἀρτέμιδι Σιδυμικῇ
 δραχμὰς τρισ[ς] χειλίας.

The inscription is of considerably later date than the tomb itself. For *δραχμαί* in inscriptions of Imperial date see Treubner, *Wesen, Ursprung . . . der auf griech. Inschr. Lykiens angeordneten Grabmassen* (G. Pr. Tübingen), p. 18.

Mamion, daughter of Labas, is the wife of Aristoteles, and stepdaughter of Name. For the name *Μάμιον* cf. *J.H.S.* vi. 354.

10. *1b.* On a panel cut on the face of a rock. Above is a rude relief of four figures. The panel measures: H. 45, B. 61. Letters 0.25. Copy and impression.

- ΕΠΑΓΑΘΟΣΒΟΤΟΝΠΥΡΓΟΝ
ΕΚΘΕΜΕΛΙΩΝΚΑΤΑΣΚΕΥΑΣΑΣ
ΛΑΒΩΝΤΟΧΩΡΙΟΝΔΙΑΓΕΝΟΥΣ
ΕΑΥΤΩΚΑΙΓΥΝΑΙΚΙΑΥΤΟΥΑΡΣΑ
5 ΣΕΙΤΗΚΑΙΜΙΩΚΑΛΛ·ΜΗΔΟΥΚΑΙΤΩ
ΓΕΝΟΜΕΝΩΥΙΩΕΠΑΓΑΘΩΚΑΙΘΥΓΑΤΡΙ
ΑΓΑΘΗΤΥΧΗΒΟΥΛΟΜΑΙΚΑΘΕΤΟΣΘΥΕΣ
ΘΑΙΗ·ΕΙΝΑΛΕΚΤΟΡΑΚΑΙΟΡΝΕΙΘΑΤΕΛΕΑ
ΚΑΙΚΑΛΗ·ΑΜΑΤΩΜΕΛΛΕΙΝΣΥΝΑΙΡΕΙΝ
10 ΤΑΓΕΝΗΜΑΤΑΟΜΟΙΩΣ·ΑΛΙΝΑΜΑΤΩ
ΜΕΛΛΕΙΝΤ'ΥΓΑΝΤΑΑΥΤΑΘΥΜΑΤΑ
ΚΑΙΕΣΤΑΙΤΩΘΥΟΝΤΙΕΠΙΔΗΛΑΚΑΙΕΠΙ
ΚΕΡΔΗΕΑΝΔΕΤΙΣΠΑΡΕΝΘΥΜΗΘΕΙΣ
ΜΗΘΥΣΗΕΣΤΑΙΑΥΤΩΕΠΙΒΛΑΒΗΚΑΙ
15 ΕΑΝΔΕΤΙΣ--Ε-ΣΡΦ----ΣΗ
-----Ε--Η-----

- Ἐπαγάθος β' ὁ τὸν πύργον
ἐκ θεμελίων κατασκευάσας,
λαβὼν τὸ χωρίον διὰ γένους,
ἑαυτῷ καὶ γυναικὶ αὐτοῦ Ἀρσά-
5 σαι τῇ καὶ Μίῳ Καλλ[ι]μήδων καὶ τῷ
γενόμενῳ υἱῷ Ἐπαγάθῳ καὶ θυγατρὶ
Ἀγαθῇ Τύχῃ, βούλομαι καθ' ἔτος θύεσ-
θαι [ἡμ]εῖν ἀλέκτορα καὶ ὄρνειθα τελέα[ν]
καὶ καλ[ήν] ἄμα τῷ μέλλειν συναίρειν
10 τὰ γενήματα· ὁμοίως [π]ύλιν ἄμα τῷ
μέλλειν τ[ρ]υγᾶν, τὰ αὐτὰ θύματα.
Καὶ ἔσται τῷ θύοντι ἐπίδηλα καὶ ἐπι-
κερδῆ. ἐὰν δέ τις παρενθυμηθεῖς
μὴ θύσῃ, ἔσται αὐτῷ ἐπιβλαβὴ, καὶ
15 ἐὰν δέ τις [ἐτ]ε[ρο]ς ὀφ[ειλή]σῃ (?)

There seemed to be another line below that beginning *ἐὰν δέ τις* . . . outside the panel, but it was almost completely obliterated.

In l. 1 *πύργος* probably refers to a tomb, cf. the use of *πυρῆσκος*, *C.I.G.* 4207, *add.* 4212, 4213, *add.* 4220 b, *add.* 4340 c. In *C.I.G.* 4341, the revised reading suggested (*add.* p. 1159) is:

τ[ὸ]ν π[ύργ]ον κα[ὶ] τ[ὸ]ν κενύοντα . . . ἐαυτῷ καὶ . . . τῇ γυναικὶ αὐτοῦ.

If ὁ *πύργος* can bear this sense of 'tomb,' it may here refer to a large rock-tomb a little higher up the hill, at the foot of which the inscription stands. The tomb is uninscribed, but on the threshold is carved a large *phallos*.

In l. 8 [ἡ]μ[ε]ῖς seems to be required by the sense and what remains of the first two letters. For the spelling here and in *δρυνεῖθα* cf. Meisterhans, *op. cit.*⁵ pp. 48 *seqq.*

In ll. 8 and 9 the restoration *τελέα[ν] καὶ καλ[ὴν]* was considered doubtful by Dr. Farnell, who suggests *καὶ κα[υὰ]*, i.e. baskets containing cereals. The impression however certainly supports our original reading *ΚΑΛΗ*////, there being space for another letter after the remains of the H and before the A. Dr. Farnell's reason for doubting *καλ[ὴν]* is the general avoidance of picturesque epithets in formal inscriptions of this nature; cf. however *Leges Gr. Sacr.* i. No. 4, l. 6 *κρίος καλλιστεύων λευκός ἐνόρχης*, l. 12 *ὅς δὲ δύο καλλιστεύουσai*, l. 27 *χίμαρος καλλιστεύων*, l. 19 *ἐπιμελέσθων δὲ τῶν ἱερῶν ὅπως καλὰ ἦ ἀρχοντες καὶ ἱερεῖς*.⁶ The phrase *δρυνεῖθα τέλειαν καὶ καλὴν* bears therefore a significance like *κρίος καλλιστεύων λευκός ἐνόρχης*.

L. 10 τὰ *γεννήματα* is used in Polyb. i. 71. 1 of the fruits of the earth. The phrase *συναίρειν τὰ γεννήματα* will then refer to the gathering of the harvest, when the first sacrifice is to take place.

L. 11. Our copy had *ΤΟΥΓΑΝ*, from which Mr. Tod had conjectured *τ[ρ]ιγών*: a reading which is supported by the impression, on which the half-circle of a P is alone visible. The second sacrifice therefore is to be made at the beginning of the vintage.

For the cock offered to the dead cf. the reliefs on the Harpy Tomb and an archaic relief from Sparta (*Ath. Mitt.* ii Pl. 20). As being the offering made to the chthonian powers, it was forbidden to the *mystai* at Eleusis. (Cf. Porphyry, *De abstinent.* 4, 16, p. 255, 5 N, Schol. Lucian, *Rhein. Mus.* xxy. 558, 26. See Rohde, *Psyche*, p. 221.)

This Epagnithos (II) is clearly identical with the Epagathos (II) of No. 8 and of *C.I.G.* 4264, 4265, all from Sidyma. In No. 8 the names are in agreement with those of the present inscription.* In *C.I.G.* 4264 however the wife is called Ἀρσις ἡ καὶ Μίαν Καλλιμήδου, the daughter also Ἀρσις ἡ καὶ

* We owe this reference to Mr. Tod, whom, together with Dr. Farnell, we have to thank for assistance with this inscription.

* For the name Ἀγασθὶ Τριγών cf. *C.I.G.* 6528 (at Rome), *J.H.S.* xv. p. 114, No. 30.

Ἀγαθὴ Τύχη. We hear also of his mother called Μαλαβαθρῆνῃ, and of grandchildren Ἐπάγαθος ὁ καὶ Δεῖος and Ἐπάγαθος.

The founder of the family may perhaps have been one Epagathos, a doctor and *accensus* of Claudius,¹ who built the stoa at Sidyma. This however is no more than a possibility, since the name Epagathos seems to have been not an uncommon one at Sidyma. We hear for example of Epaphrodeitos and Zosime, children of Epagathos (C.I.G. 4264), who may or may not have been great-grandchildren of Epagathos (II). Again the Ἐπάγαθος ὁ καὶ Δεῖος of No. 13 (q.v.) is probably to be distinguished from the grandson of Ἐπάγαθος β', also called Ἐπάγαθος ὁ καὶ Δεῖος (U.I.G. 4246).

11. *Th* Broken limestone block among the ruins of a small building of squared blocks. Letters 025. Copy.

ΕΙΣΘΚΑΤΕΘΕΤΟΥΙΟΝΔΕΙ
ΟΝΚΑΙΟΥΓΑΤΕΡΑΚΟΣΜΙΑΝ
ΕΞΟΥΣΙΑΝΔΕΕΞΟΥΣΙΝ
ΕΙΒΟΥΛΗΘΩΣΙΝΕΝΑΥΤΩΤΕ
5 ΘΗΝΑΙΤΑΓΛΥΚΥΤΑΤΑΤΕΚΝΑ
ΜΟΥΔΙΟΔΩΡΟΣΜΕΤΑΤΗΣ
ΓΥΝΑΙΚΟΣΑΥΤΟΥΤΑΝΗΠΟΛΕΜ
ΟΣΣΕΛΟΝΤΟΣΚΑΙΟΕΚΓΟΝΟΣ
ΜΟΥΛΕΩΝΔΙΟΔΩΡΟΥΚΑΙΠΑΤ
10 ΡΟΣΜΕΤΑΤΗΣΓΥΝΑΙΚΟΣΑΡ
ΣΑΣΙΔΟΣΣΕΛΟΝΤΟΣΚΑΙΟΕΚΓΟ
ΝΟΣΜΟΥΛΕΩΝΠΑΠΠΟΥΚΑΙ
Ε Α ΟΣΜΕΤΑΤΗΣΓΥΝΑΙΚΟΣ
ΝΑΝΝΗΣΠΟΛΥΚΑΡΠΟΥΚΑΙ
15 ΟΕΚΓΟΝΟΣΜΟΥΕΠΑΓΑΘΟΣ
ΟΚΑΙΔΕΙΟΣΚΑΙΗΟΥΓΑΤΗ
ΜΟΥΜΕΛΠΟΜΕΝΗΚΑΙΤ/
ΤΕΚΝΑΤΟΥΠΡΟΙΟΝΕΣΤ/
ΤΟΥΥΙΟΥΔΕΙΟΤΡΙ
20 ΚΑΙΜΕΛΠΟΜΕΝΗΜΕΤΕΡΩ
ΟΥΔΕΝΙΕΞΟΝΕΣΤΑΙΘΑ
ΥΑΙΤΙΝΑΝΑΠΟΤΕΙΣΑΙΤΩ
ΣΙΔΥΜΕΩΝΔΗΜΩΧ . . Υ
ΕΙΜΕΝΟΣ . ΤΩΤΗΣΑ
25 ΒΕΙΑΣΝΟΜΩΟΛΕ
ΣΑΣΗΜΥΕΤ

εἶσαι κατέθετο υἱὸν Δεῖ-
ον καὶ θυγατέρα Κοσμίαν.
ἐξουσίαν δὲ ἔχουσιν,
εἰ βουληθῶσιν, ἐν αὐτῷ τε-
θῆναι τὰ γλυκύτερα τέκνα
μου Διόδωρος μετὰ τῆς
γυναϊκὸς αὐτοῦ Τληπολέμ(ι)-
ος Λέοντος καὶ ὁ ἔκγονός
μου Λέων Διοδόρων, καὶ Παπ-
πος μετὰ τῆς γυναϊκὸς Ἀρ-
σασίδος Λέοντος καὶ ὁ ἔκγο-
νός μου Λέων Παππον, καὶ
Ἐπάγ[α]θος μετὰ τῆς γυναϊκὸς
Νάννης Πολυκάρπου καὶ
ὁ ἔκγονός μου Ἐπάγαθος
ὁ καὶ Δεῖος, καὶ ἡ θυγάτηρ
μου Μελπομένη, καὶ τὰ
τέκνα τοῦ προ[γ]ονεστ[ι]-
του(ν) υἱοῦ, Δεῖ[ο]ς τρι[ς]
καὶ Μελπομένη ἑτέρω
ἐλ[λ] σὺνδὲ ἐξόν ἔσται θά-
ψαι τινὰ ἢ ἀποστείσαι (εἶν) τῷ
Σιδυμέων δήμῳ δηγάρια) . . ἢ π-
οσ[τ]οιμένοις [έσ]τω τῆς [άσε-
βείας νόμ]ου, ὁ [δ]ὲ [ἐλέν-
(ξ)ας λήμψεται . . .

¹ *Antea*, I. p. 63, No. 30.

In l. 1 the ω of $\epsilon\iota\omega$ is very faint and may well have been α . The sense in either case is hardly affected, $\epsilon\iota\varsigma$ & having for antecedent τὸ μνημεῖον or τὸ ἥρῃον in the few lines missing above; $\epsilon\iota\omega = \epsilon\iota\omega$.

In l. 7 we read Τληπόλεμ(ι)ος as the genitive of a feminine name Τληπόλεμης. For the form cf. Στрасиθѣμος in No. 24. A woman's name is required. Each son of the builder of the tomb is mentioned together with his wife, her father's name, and their son. Diodoros and Pappos married sisters, daughters of Leon; and each named his son after his father-in-law.

In l. 13 Ἐπάγ[α]θ[ος] is a certain restoration, his son being called Ἐπάγαθος ὁ καὶ Δείος in l. 15. This mention of an Ἐπάγαθος ὁ καὶ Δείος makes it possible that he is identical with the Ἐπάγαθος ὁ καὶ Δείος of *C.I.G.* 4264, the grandson of Ἐπάγαθος (II), and that here we have to do with another inscription erected by this same Ἐπάγαθος (II). In no other inscription, however, erected by him, do we hear of these children, and moreover the daughter Ἀγαθὴ Τέχη is here omitted.

In l. 18 προ[γ]οιστ[ά]του seems on the whole the most probable restoration; πρόγονος = *proignus*, and the superlative may possibly be used in the sense of 'eldest stepson.'

The last three lines of the inscription are very faint and worn. For the formula cf. *C.I.G.* 4266, ἐπεύθυνος τῷ τῆς Ἀσβελας νόμῳ, *Reisen*, I. p. 80, No. 62, ἐποκείσεται τῷ τῆς τυμβαρυχίας νόμῳ. Cf. Arkwright, *J.H.S.* xxi. p. 269, note 4.

12. Tlos. Small limestone fragment in the yard of a house in the lower village of Düver. Letters 035. Copy.

ΣΑΒΕΙΝΗ	Σαβεῖνη
ΣΕΒΑΣΤΗ	Σεβαστῇ
ΝΕΑΪΡΑ	Νέα [Ἡ]ρα
ΟΥΕΙΛΙΑΠΡΟΚΛΑ	Οὐέλία Πρόκλ[α]
5 ΑΙΚΛΑΥΔΙΟΣ	καὶ Κλαύδιος
ΟΥΙΑΝΟ-	Φλαουιανός.

Sabina Sebaste is the wife of Hadrian (cf. Dittenberger, *O.G.I.* 681). For a similar dedication to her at Patara where she is also called νεά Ἡρα, see *J.H.S.* x. p. 78, No. 30 (= Cagnat, *I.G. ad Res Rom. pert.* iii. No. 663). In the present case the H and P must have been written in a ligature. In *C.I.G.* 1073, Sabina is called νεά Δημήτηρ at Megara, and *ib.* 435, νεωτέρα θεός near Eleusis (see Boeckh's note *ad loc.*). The empress Julia is also called νεά Ἡρα,* and Nero styles himself νέος Ἡλίας.†

Οὐέλία Κο. Οὐελίου Τιτιανού θυγάτηρ Πρόκλα Παταρίς (*C.I.G.* 4283 = Cagnat, *op. cit.* iii. 664) in the year 147 A.D. dedicated the *proscenium* of the theatre at Patara built by her father. Another dedication at Patara

* Ramsey, *C.P.* I. p. 229; cf. also p. 54.

† *R.C.H.* xii. p. 514, l. 34; cf. Lanckoroński,

Städt. Pamphyliens und Pisidiens, II. No. 221 (inscription at Sagalassos).

(*J.H.S.* x. p. 79, No. 31 = Cagnat, *op. cit.* iii. 665) is made by Claudia Velia Procula to Faustina, wife of Marcus Aurelius, and by Tiberius Claudius Flavianus Titianus to Marcus Aurelius and to Lucius Verus. That Quintus Velius Titianus and Tiberius Claudius Flavianus Titianus are identical appears at first sight probable from an inscription of Patara published by Kalinka (*Erasmios Vindobonensis*, p. 90, n. 2 = Cagnat, *op. cit.* iii. 667), where a dedication is made by Velia Procula to her father, whose full name is given as Ti. Claudius Flavianus Titianus Quintus Velius Proculus Lucius Marcus Celer Marcus Calpurnius Longus, where in the list of magistracies held by him is mentioned the proconsulship of Cyprus (cf. *Proc. Imp. Rom.* i. p. 372, 696; iii. p. 434, 436). On the other hand Quintus Velius Titianus of Patara, according to an inscription of Cadyanda (*B.C.H.* x. p. 48, No. 8, Cagnat, *op. cit.* iii. 513, Dittenberger, *O.G.I.* 563) does not seem to have held the higher imperial offices. Dittenberger accordingly thinks that the two are to be distinguished.

The Claudius Flavianus of the present inscription will therefore be the proconsul of Cyprus, and his daughter Claudia Velia Procula (cf. *J.H.S.* *loc. cit.*).

Velia Procula, daughter of Quintus Velius Titianus seems to have been married, according to an inscription of Thes (*C.I.G.* 4248, Cagnat, *op. cit.* iii. 567) to one Εδύχιος or Εδύχιος, but the reading is not altogether certain.

13. *Ib.* Built into wall of a house close to the guest-house of the upper village of Düver. H. 28, B. 26. Letter 015. Copy.

ΛΕΟΝΤΙΣΚΟΣ ΠΤΟΛΕ	Λεοντίσκος Πτολε-
ΜΑΙΟΥ ΕΠΙ ΤΩΙΩΑΝΔΡΕ	μαίου ἐπὶ τῷ υἱῷ Ἀνδρ[ο-]
ΒΙΩΚΑΙ ΤΕΙΤΑΝΙΣ ΛΕΟΝ	βίῳ καὶ Τεττανίς Λεον-
ΤΙΣΚΟΥ ΕΠΙ ΤΩΑΔΕΛΦΩ	τίσκου ἐπὶ τῷ ἀδελφῷ
5 ΚΑΙ ΑΝΔΡΙΑΝΔΡΟΒΙΩ	καὶ ἀνδρὶ Ἀνδροβίῳ
ΤΑΙ ΛΕΟΝΤΙΣΚΟΣ ΕΠ	καὶ Λεοντίσκος ἐπ[ὶ]
ΤΩ ΠΑΤΡΙ ΜΗΜΗΣ	τῷ πατρὶ μνήμης
ΝΕΚΕΝΗΡΣΙ ΘΥΣΕΙΔΕ	ἐ[κ]κεν ἡρ[ω]ς. Θύσει δ[ὲ]
ΤΗΤΩΡΤΗΣΟΚΙΑΣ	ὁ κ[α]τήτωρ τῆς οἰκίας
10 ΤΕΝΙΑΥΤΟΝΕΝΤΗΒ	κα[ὶ] τ[ὸ] ἐνιαυτὸν ἐν τῇ ιβ'
ΥΣΑΝΔΙΚΟΥ ΕΡΙΦΟΝ	τοῦ Ξανδικοῦ ἐριφόν
ΙΣΤΙΕΑΝΔΕΜΗΘΥΣΕΙ	δ[ι] (ε) τ[ῇ]. εἰάν δὲ μὴ θύσει
ΙΑΡΤΩΛΟΣ ΕΣΤΩ	ἀμ[α]ρτωλὸς ἔστω
ΘΕΟΙΣ ΚΑΙ ΗΡΩΣΙ	θεοῖς καὶ ἡρώσι.

Teitania, daughter of Leontiskos, is the wife and (presumably) half-sister of Androbios, in whose memory the inscription is engraved.

In line 12 the reading δ[ι] (ε) τ[ῇ] was suggested by Mr. Tod.

14. *If*. In a field to the N.E. of the acropolis. On a panel, measuring H. 30, B. 37, broken at the lower edge. Letters 03. The two letters above the panel 04. Copy.

ZH

ΛΕΥΚΙΟΣ ΑΠΟΛΛΩΝΙΟΥ ΒΟΥΔΙΟΤΕΙ

ΜΟΥΤΛΩΕΥΣΤΟΗΡΩΝΚΑΤΕΣΚΕΥΑΣΕΝ

ΕΑΥΤΩΚΑΙ ΓΥΝΑΙΚΙΑΥΤΟΥ ΛΑΛΛΑΕΡΜΑ

5 ΚΟΤΟΥ ΚΑΙ ΤΕΚΝΟΙΣ ΕΑΥΤΩΝ ΚΑΙ ΕΚΓΟΝΟΙΣ

ΚΑΙ ΟΙΣ ΑΝ ΑΥΤΟΣ ΕΓΩ ΣΥΝΧΩΡΗΣΩ ΕΤΕΡΩ

ΔΕ ΟΥΔΕΝΙ ΕΞ ΕΣΤΑΙ ΣΥΝΧΩΡΗΣΑΙ ΗΘΟΦΕΙ

* ΕΣΟΥΣΙΝ ΟΤΙ ΣΥΝΧΩΗΣΑΣ ΚΑΙ ΘΑΨΑΣ

Zβ.

Λεύκιος Ἀπολλωνίου β' τοῦ Διοτί-

μον Πλωεῖν τὸ ἥρῳον κατασκεύασεν

ἑαυτῷ καὶ γυναικὶ αὐτοῦ Λάλλα Ἑρμα-

5 κότου καὶ τέκνοις ἑαυτῶν καὶ ἐγγόνοις

καὶ οἷς ἂν αὐτὸς ἐγὼ συνχωρήσω· ἑτέρῳ

δὲ οὐδενὶ ἐξ ἐστῶν συνχωρήσαι, ἢ ὀφεί-

λῆσανται ὁ [ε] συνχωρήσας καὶ ὁ θάψας

L. 1. Zβ. cf. *C.I.G.* 4245, 4246 (both at Tlos), and Reinach, *Traité d'Épigr.* p. 427.

L. 4. For the name Ἑρμακότας cf. *C.I.G.* 4255, 4278, *Reisen*, II. 102.

15. *If*. Large square base, the top broken; limestone. Letters 025. Copy.

Ω

ΑΣΠΑΝΘ

ΗΝΑΣΑΔΡΙΑΝΕΙΑ

ΑΣΕΣΑΡΓΟΥΣΑΣΠΙΛ

5 ΑΛΕΙΑΕΝΡΟΔΩ

ΜΕΙΛΗΤΟΝΚΟΜΜΟΔΕ

ΣΜΥΡΝΑΝΠΡΩΤΑΚΟΙΝΑΑ

ΠΕΡΓΑΜΟΝΑΥΓΟΥΣΤΕΙΑ Β

ΠΕΡΓΑΜΟΝΤΡΑΙΑΝΕΙΑ Β

10 ΕΦΕΣΟΝΟΥΜΠΙΑ· ΕΦΕΣΟΝ Β

ΛΗΑ· ΕΦΕΣΟΝΑΡΤΕΜΕΙΣΙΑΚΟΝ

ΔΕΙΑ· ΕΝΑΝΤΙΟΧΕΙΑΟΥΜΠΙΑΤ/

- Καπετωλία ἐν Ῥώμῃ
 Ἀθήνας Παναθήναια·
 Ἀθῆνας Ἀδριάνεια· τῇ
 Ἡρας ἐξ Ἀργεὺς ἀσπίδα·
 5 Ἀλεια ἐν Ῥόδῳ·
 Μελλήτων Κομμόδεια·
 Σμύρναν πρώτη κοινὰ Ἀσίας·
 Πέργαμον Ἀνγούστεια β·
 Πέργαμον Τραϊάνεια β·
 10 Ἐφεσον Ὀλύμπια· Ἐφεσον Βαρβι-
 λλα· Ἐφεσον Ἀρτεμείσια Κομμό-
 δεα· ἐν Ἀντιοχείᾳ Ὀλύμπια τ[.]·

For the general form of the inscription cf. Sterrett, *Wolfe Expedition*, p. 291, No. 413. Probably here too we have a public decree inscribed on the base of a statue in honour of a distinguished local athlete. The mention of Κομμόδεια at Miletus (l. 6), and at Ephesus (l. 11) enables us to fix the date approximately.

L. 1. For the restoration, cf. Sterrett, *ib.* l. 9.

L. 4. Cf. *ibid.* l. 13-14, τῇ ἐξ Ἀργεὺς ἀσπίδα, which is the more usual formula; for the addition of Ἡρας cf. *C.I.G.* 5913, τὴν ἀσπίδα Ἡρας ἐν Ἀργεὺς.

L. 5. For the Ἀλεια at Rhodes v. *C.I.G.* 3208.

L. 6. Κομμόδεια is known at Miletus as a bye-name attached to Διόμεια,¹⁹ but we can find no other instance of it standing alone.

L. 7. For the restoration cf. Ditt, *O.G.I.* 509, l. 24.

L. 10. For Βαρβιλλλα cf. *C.I.G.* 2741 and Ditt, *O.G.I.* i. 153.

L. 11. Κομμόδεα seems new as a bye-name of Ἀρτεμείσια and doubtless was in use only for a short time.

L. 12. Doubtless Antioch on the Orontes is intended, though the enumeration of cities is not strictly geographical, but cf. *C.I.G.* 3425, περιουσίῃς . . . ἀγωνίας τοὺς ἀπὸ τῆς οἰκουμένης πάντας ἀπὸ Καπετωλείων ὡς Ἀντιοχείαν τῆς Συρίας. This seems to be the first recorded mention of the Ὀλύμπια of Antioch in an inscription, though the games, founded in A.D. 44, are otherwise well known.²⁰

16. *ib.* Stèle erect in a field near the guest-house. The top is broken. H. (without top) 0·6, B. 49. Letters 0·2. Copy.

ΕΠΙ ΑΩΝΙΤΩΝ ΜΕΓΑΛΩΝ
 ΚΡΟΝΕΙΩΝ ΑΓΩΝΟΘΕΤΟΥ
 ΤΟΣΤΟΥ ΑΖΙΟΛΟΓΩΤΑΤΟΥ
 ΑΥΡ-ΔΙΟΓΕΝΟΥΣ ΤΟΥ ΚΑΙΔΙΟ
 5 ΝΥΣΙΟΥ ΑΡΣΑΚΟΥ ΑΡΣΑΚΟΥ
 ΝΕΙΣΕΩΣ ΚΑΙ ΤΛΩΕΩΣ
 Μ-ΠΟΠΙΛΛΙΣΩΤΥΣ ΓΕΡ

Ἐπὶ ἡ[γ]ῶν τῶν μεγάλων
 Κρονείων, ἀγωνοθετοῦ[ν]-
 τος τοῦ ἀξιολογωτάτου.
 Αὐρ. Διογένους τοῦ καὶ Διο-
 γνησίου Ἀρσάκου Ἀρσάκου,
 Νεισέως καὶ Τλωέως,
 Μ. Ποπίλλιος Σωτὴς, (H)ερ-

¹⁹ *C.I.G.* 2885 c.

²⁰ See Krause, *Gymnasia*, p. 207 and the references there collected.

ΓΑΤΟΣΚΑΙΚΙΒΥΡΑΤΗΣ
 ΝΕΙΚΗΣΑΣΕΝΘΛΑΜ
 10 ΠΡΟΤΑΤΗΤΛΩΕΩΝΠΟ
 ΛΕΙΤΗΜΗΤΡΟΠΟΛΕΙ
 ΤΟΥΛΥΚΙΩΝΕΘΝΟΥΣ
 ΠΥΘΙΚΩΝ ΔΙΑΥΛΟΝ
 ΠΥΘΙΟΝΙΚΗΣ ΟΛΥΝ
 15 ΠΙΟΝΙΚΗΣ ΠΛΕΙΣΤΟ
 ΝΙΚΗΣ ΠΑΡΑΔΟΞΟΣ
 ΕΥΤΥΧΙ

γα(τ)ος καὶ Κιβυράτης,
 νεικήσας ἐν τῇ λαμ-
 προτάτῃ Τλωέων πό-
 λει, τῇ μητροπόλει
 τοῦ Λυκίων ἔθνους,
 Πυθικῶν διαυλόν
 Πυθιονίκης, Ὀλυν-
 πιονίκης, πλειστο-
 νίκης παράδοξος
 εὐτύχι.

For the name Σωτῆς cf. *C.I.G.* 6592 "Αννιος Σωτῆς (in Italy). For the position of Neisa in Lycia see Hobardey, *Festschrift für Kiepert*, pp. 154 seqq. We should certainly read (Π)εργα(τ)ος καὶ Κιβυράτης in ll. 7 and 8, assuming that our original reading ΓΕ was a ligatured ΓΕ, and that the Τ was due to a crack in the stone above the Ι. For the concluding words cf. *C.I.G.* 4240 c, Ὀλυμπιονείκης, πλειστονείκης, παράδοξος. For εὐτύχι (= bravo!) v. Woodward in *B.S.A.* xvi. p. 125.

17. *Ib.* Small limestone block brought to the guest-house. H. 16. B. 13. Letters 015. Copy.

ΛΙΔΑΙΔΑΛΟΣ
 ΚΑΙ ΠΑΝΤΩΝ ΕΤΕ
 ΡΟΣΚΑΙΜΑΚΑ
 5 ΡΩΝΟΡΓΙΑΣΕ
 ΜΝΑΤΕΛΕΣΣΑΣ
 ΓΗΡΑΣΙΜΟΣ ΠΙ
 ΝΥΤΟΦΡΩΝΕΝ
 10 ΘΑΔΕΚΕΙΜΕ
 ΠΕΝΤΗΚΟΝ

ΛΙ Δαίδαλος
 καὶ πάντων ἐτ(αῖ-)
 ρος καὶ μακά-
 ρων ὄργια σε-
 μνά τελέσσας,
 γηράσιμος, πι-
 νυτόφρων, ἐν-
 θάδε κείμε
 πεντήκου-
 [τα ἐτῶν.]

In L 3 ἐτερος is almost certainly a late spelling of ἑταῖρος. Daïdalos seems to have been a member of some θιάσος, possibly Kabeiric,¹¹ or more probably Orphic. The word πινυτόφρων is explained in the *Thesaurus* (s.v.) as πινυτός τῆν φράνησιν. Cf. Hesychius (s.v.) σῶφρονέστατος, συνετώτατος. γηράσιμος does not seem to occur elsewhere. It is probably to be connected with γῆρας.

The whole is roughly metrical.

¹¹ For the worship of the Kabiroi at Theb. cf. *J.H.S.* xv. p. 122, No. 10.

18. *Pl.* At the foot of N.E. slope of the acropolis, on a large panel (the lines often running over the edge). Letters 02. Copy.

- ΤΟΗΡΩΝΚΑΤΕΣΚΕΥΑΣΜΕΝΟΙΣ
 ΤΗΝΚΛΕΙΝΗΝΛΑΧΟΝΤΕΣΚΑΙΥΠΟΓΕΓΡΑΜΜΕ
 ΝΟΝΚΑΙΕΠΕΛΑΧΑΝΑΙΚΛΕΙΝΑΙΕΜΕΝΔΕΞΙΟΙΣΕΙΣΕΡΧΟ
 5 ΕΝΩΝΑΣΚΛΗΠΙΑΔΗΣΟΚΑΙΦΙΛΟΥΜΕΝΟΣ
 ΟΚΟΝΔΑΣΟΚΑΙΗΡΑΚΛΑΣΓΛΥΚΩΝΚΡΑΤΕΡΟΥ·Β·
 ΕΥΘΕΡΟΣΟΚΑΙΑΠΟΛΛΩΝΙΟΣΚΑΛΛΙΝΕΙΚΟΣ·Δ·ΤΟΥ
 ΘΗΜΕΡΟΥΠΟΛΥΝΕΙΚΟΣ·ΓΛΥΚΩΝΟΣΕΝΔΕΤΗΕΥΩΝΥΜΩΚΛΕΙ
 10 ΙΡΗΝΑΙΟΣΔΑΜΑ·Β·ΖΩΣΙΜΟΣ·Β·ΑΠΟΛΛΩΝΙΟΣ·Γ·ΟΚΑΙΣΥΜ
 ΑΧΙΔΗΣΦΙΛΟΚΥΡΟΣΑΠΟΛΛΩΝΙΟΥ·Β·ΤΟΥΣΥΜΜΑΣΙΟΣΕΙΡΗ
 ΝΑΙΟΣΑΡΤΕΙΜΟΥΠΟΜΠΗΙΟΣΑΡΠΑΛΟΥΤΟΥΚΑΙΚΑΡΠΟΥΕΝΔΕΤΗ
 ΜΕΣΗΚΛΕΙΝΗΑΠΟΛΛΩΝΙΟΣΚΑΙΖΩΤΙΚΟΣΕΠΑΦΡΟΔΕΙΤΟΣ·Γ·
 ΣΤΕΦΑΝΟΣΕΠΑΦΡΟΔΕΙΤΟΥΑΛΕΞΑΝΔΡΟΣ·Β·ΤΟΥΕΙΡΗΝΑΙΟΥ
 15 ΕΙΡΗΝΑΙΟΣ·Γ·ΤΙΛΟΝΑΠΟΛΥΚΤΗΤΟΣΑΠΟΛΛΩΝΙΟΥ·Β·ΤΟΥΣΥΜ
 ΜΑΣΙΟΣΕΞΟΥΣΙΝΔΕΣΥΝΕΝΤΑΦΗΝΚΑΙΓΥΝΑΙΚΕΣ
 ΑΥΤΩΝΚΑΙΤΕΚΝΑΚΑΙΕΓΓΟΝΑΜΟΝΑΤΟΔΕΛΟΙΠΟΝΓΕ
 ΝΟΣΠΕΠΑΥΣΘΑΙΕΝΔΕΤΩΥΠΟΣΟΡΙΩΤΕΘΗΣΟΝΤΑΙΤΩΝ
 ΑΠΟΤΗΣΣΥΜΒΙΩΣΕΩΣΑΥΤΩΝΘΡΕΠΤΑΕΤΕΡΟΣΔΕ
 ΟΥΔΕΕΙΣΕΞΕΙΞΟΥΣΙΑΝΟΥΤΕΣΥΝΧΩΡΗΣΑΙΤΙΝΙ
 20 ΟΥΤΕΝΘΑΨΑΙΤΙΝΑΗΟΕΠΙΧΕΙΡΗΣΑΣΟΦΕΙΛΗΣΕΙΤΗΤΛΩΕΩΝ
 ΠΟΛΕΙΧΑΦΩΝΟΕΛΕΝΞΑΣΛΗΝΨΕΤΑΙΤΟΤΡΙΤΟΝΟΥΔΕΕΤΕ
 ΡΟΣΕΙΣΤΗΝΕΤΕΡΟΥΚΛΕΙΝΝΤΗΜΗΕΠΙΚΟΙΝΩΝΟΥ
 ΣΑΝΑΥΤΩΚΑΤΑΘΗΣΕΤΑΙΤΙΝΑΗΟΚΑΤΑΘΕΜΕΝΟΣΟ
 ΜΟΙΩΣΟΦΕΙΛΗΣΕΙΤΗΠΟΛΕΙΧΤΩΝΚΑΙΤΟΥΤΩΝΟΕΛΕΝ
 ΞΑΣΛΗΝΨΕΤΑΙΤΟΤΡΙΤΟΝΗΔΕΕΠΙΓΡΑΦΗΑΥΤΗ

- τὸ ἥρῳον κατεσκευάσαν οἱ ΑΣ
 τὴν κλείην λαχόντες κα[τ'] ὑπογεγραμμέ-
 του καὶ ἐπέλαχ(ο)ν αἱ κλεῖναι ἐν μὲν δεξιῇ εἰσερχο-
 μένων Ἀσκληπιάδης ὁ καὶ Φιλούμενος,
 5 Ἐρξοκλῆδος ὁ καὶ Ἡρακλᾶς, Γλύκων Κρατέρου β',
 Ἐλεύθερος ὁ καὶ Ἀπολλώνιος, Καλλίνεικος δ' τοῦ
 Εὐθήμερου, Πολύνεικος Γλύκωνος· ἐν δὲ τῇ αὐαύρῳ κλεί-
 νῃ Εἰρήναιος Δαμᾶ β', Ζώσιμος β', Ἀπολλώνιος γ' ὁ καὶ Συμ-
 μαχίδης, Φιλόκυρος Ἀπολλωνίου β' τοῦ Συμμάσιος, Εἰρη-
 10 ναῖος Ἀρτεῖμον, Πομπήιος Ἀρπάλου τοῦ καὶ Καρτοῦ· ἐν δὲ τῇ
 μέσῃ κλείῃ Ἀπολλώνιος (ὁ) καὶ Ζωτικός, Ἐπαφροδεῖτος γ',
 Στέφανος Ἐπαφροδεΐτου, Ἀλέξανδρος β' τοῦ Εἰρηναίου,
 Εἰρηναῖος γ' Τίλῳ, Πολύκτητος Ἀπολλωνίου β' τοῦ Συμ-
 μάσιου. Ἐξουσίαν δὲ συνεντάφην καὶ γυναῖκες
 15 αὐτῶν καὶ τέκνα καὶ ἔγγονα μόνα, τὸ δὲ λοιπὸν γέ-

- νος πεποιῦσθαι. Ἐν δὲ τῷ ὑποσφρίῳ τεθήσονται τῶν
ἀπὸ τῆς συμβιώσεως αὐτῶν θρεπτά· ἕτερος δὲ
οὐδὲ εἰς ἔξει ἐξουσίαν οὔτε συνχωρήσai τι - - -
οὔτε ἐνθαψαί τινα, ἢ ὁ ἐπιχειρήσας ὀφειλήσει τῇ Γλωσσίῳ
20 πόλει (δηνάρια) ἀφ', ὧν ὁ Δένξας λήνψεται τὸ τρίτον· οὐδὲ ἑτε-
ρος εἰς τὴν ἑτέρου κλείην τὴν μὴ ἐπικουρωνού-
σαν αὐτῷ καταθήσεται τινα ἢ ὁ καταθέμενος ὁ-
μοίως ὀφειλήσει τῇ πόλει (δηνάρια) τ', ὧν καὶ τοῦτων ὁ Δέν-
ξας λήνψεται τὸ τρίτον. Ἡ δὲ ἐπιγραφή αὕτη - - -

For the general form of the inscription cf. *C.I.G.* 4246 and the fragment 4250, though the formula here is rather different.

L. 2. Probably the letter before ὑπογεγραμμένου was a Τ, our copies show γ.

L. 3. Apparently two subjects; κλείναι or the following names are a possible subject for the verb, and presumably the composer of the inscription, or the engraver, has lost his thread owing to the clumsy parenthesis ἐν μὲν δεξιοῖς κ.τ.λ.

L. 4. Φιλόμενος, cf. No. 46 (from Olympia).

L. 8. Δαμᾶς is a not uncommon name, cf. *B.S.A.* xvi. p. 127, note. Συμμαχίδης we cannot find elsewhere.

L. 9. Γῆ Σάρμας cf. *Reisen*, ii. 54 (Myra).

L. 13. For Τιλόμεας cf. *ibid.* i. No. 29; and *T.A.M.* 44 b, 21, *Tiloma* (cf. *ib.* 189).

L. 24. For the concluding formula cf. *C.I.G.* 4247 (the end of another funerary inscription also from Tlos) ἡ δὲ ἐπιγραφή αὕτη καὶ ἡ ἀσφάλεια ἀναγέγραπται διὰ τῶν δημοσίων γραμματοφυλάκων ἐπὶ ἀρχιερέως, κ.τ.λ.

19. In a Turkish cemetery near the village of Gornböku c. 1½ hrs. to N. of the Kara Tezal on the road from Tlos to Xanthus. Copy.

ΜΟΛΥΚΟΣΣΟΡΤΙΟΥΕΠΗΛΕΑΨ
ΑΔΕΛΦΩΚΑΙΣΟΡΤΙΑΣΙΑΣΟΝΟ
ΠΙΤΩΕΑΤΟΥΠΑΤΡΙΑΣΟΝΙΣΟΡ
ΚΑΙΕΠΙΤΗΜΗΤΡΙΛΑΜΑΣΟΜΑΣΙ

Ἐρ]μόλυκος Σορτίου ἐπὶ [τ]ῷ ἐα[υτ-
οῦ] ἀδελφῷ, καὶ Σορτίας Ἰάσονος
ἐπὶ τῷ ἐατοῦ[σις] πατρὶ Ἰάσονι Σορ[τί-
ου καὶ ἐπὶ τῇ μητρὶ [Δ]αμᾶ (ῖ) Σομάσου?

The concluding letters are uncertain. Δαμᾶς is not an uncommon masculine name,¹² but there seems no example of the feminine form, nor of the name Σομάσος.

¹² See above, No. 15.

20. Xanthus. In a Turkish cemetery, 20 minutes to the N.E. of the town, containing several architectural blocks and the inscription published *J.H.S.* xv. p. 124, No. 14. Circular limestone basis, H. 62. Letters, first line 035, rest 015. Copy.

ΥΟΙΣΔΥΣΙΝΜΕΕΘΗΚΕΝ
ΑΘΛΙΟΣΠΑΤΗΡ
ΑΚΑΤΑΜΑΧΗΤΩΔΟΙΕΤΕΙ
ΤΡΙΣΕΞΔΕΕΤΩΝ
5 ΑΣΙΑΤΙΚΩΚΑΙΤΟΝΜΕΝ
ΩΛΕΣΑΝΦΛΟΓΕΣ
ΤΟΝΔΑΥΦΡΕΝΗΡΗΙΑΤΡΟΝ
ΗΡΠΑΣΕΝΝΟΣΟΣ
ΩΝΗΣΕΔΕΟΥΔΕΝΗΕΥΣΕΒΕΙΑ
10 ΤΟΥΣΓΟΝΗΣ

Τοῖς δυσίν με ἔθηκεν | ἄθλιος πατήρ |
Ἀκαταμαχῆτῳ δοιεῖ, | τρίς ἕξ δέ ἐτών |
5 Ἀσιατικῷ, καὶ τὸν μὲν | ὤλεσαν φλόγες, |
Ταύδ' αὖ φρενῆρη ἰατρὸν | ἥρπασεν νόσος, |
Ὦνήσε δὲ οὐδ' [ρ] ἢ εὐσίβεια | τοὺς γονῆς.

21. *Pl.* Limestone block above the village of Günik. H. 30, B. 1-23. Letters 04 (those to rt. 035). Copy.

ΤΟΗΡΩΝΚΑΤΣΚΕΥΑΕΝΑΥΡΖΩΙΜΟΣ
ΑΦΡΟΔΕΙΣΙΑΕΑΥΤΩΚΑΙΤΗΓΥΝΑΙΚΙΜΟΥ ΡΟΥ
ΟΜΟΝΟΙΑΚΑΙΤΟΙΣΖΗΜΩΝΕΤΕΡΟΣΔΕΟΥΔΕ ΕΙΑ
ΕΙΣΤΑΦΗΕΤΑΙΗΛΠΟΤΕΙΕΙΘΘΑΨΑΣΤΗΓΕ ΧΦ

Τὸ ἥρῳον κατ[ε]σκεύασεν Αὐρ. Ζώσιμος
Ἀφροδισίας αὐτῷ καὶ τῇ γυναικί μου
Ὁμονοία καὶ τοῖς (2)ξ ἡμῶν ἕτερος δὲ οὐδὲ
εἰς ταφήσεται ἢ [α]ποτείσει ὁ θάψας τῇ γε-
5 ρον-
σίᾳ
(ἐτηρία) Φ'.

In l. 3 E has been omitted by the stonecutter between the C and Z. Lack of space below line 4 caused the remaining letters to be written to the right.

22. *Pl.* Round basis or altar to W. of Roman arch. H. 60. Letters 03. Copy.

ΑΦΡΟΔΕΙΤΗ
ΕΠΗΚΟΩ
Ἀφροδείτῃ
Ἐπηκόῳ.

23. *Pl.* Round basis built into medievall wall on the N.E. of the acropolis. H. 50, circumference 97. Letters 92. Copy.

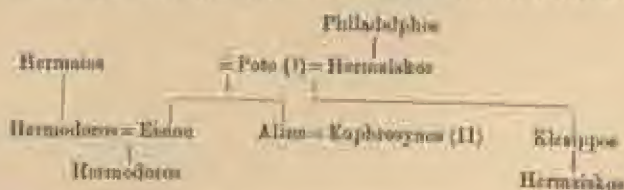
ΕΡΜΟΔΩΡΟΣΕΡΜΑΙΟΥ
 ΚΑΙΕΙΣΙΟΝΕΡΜΟΔΩΡΩΤΩ
 ΕΑΥΤΩΝΥΙΩΙ // Α // ΙΟΤΗΤΟΝΤΗΣ
 ΘΥΓΑΤΡΟΣΥΙΟΝΚΑΙΕΡΜΑΙΣΚΟΣ
 ΦΙΛΑΔΕΛΦΟΥΤΟΝΤΗΣΠΡΟΓΟΝΟΥΥΙ
 ΟΝΚΑΙΛΙΝΗΤΟΝ ΗΣΑΔΕΛΦΗΣΥΙΟΝΚΑΙ
 ΕΥΦΡΟΣΥΝΟΣΔΙΣΑΥΤΟΝΤΗΣΓΥΝΑΙΚΟΣ
 ΑΔΕΛΦΗΣΥΙΟΝΚΑΙΕΡΜΑΙΣΚΟΣΚΛΗΣΙΠΠΟΥ
 ΤΟΝΕΑΤΟΥΑΝΕΨΙΟΝ
 ΗΡΩΙ

Ἑρμοδῶρος Ἑρμαίου
 καὶ Εἰσίον Ἑρμοδῶρι τῷ
 ἑαυτῶν υἱῷ, [κ]α[ι] Π[ό]τῃ(?) τὸν τῆς
 θυγατρὸς υἱόν, καὶ Ἑρμαῖσκος
 Φιλαδέλφου τὸν τῆς προγόνου υἱ-
 όν, καὶ Ἀλίῃ τὸν [τ]ῆς ἀδελφῆς υἱόν, καὶ
 Εὐφρόσυνος δις αὐτὸν τῆς γυναικὸς
 ἀδελφῆς υἱόν, καὶ Ἑρμαῖσκος Κλησίππου
 τὸν ἐατοῦ (εἰς) ἀνέψιόν
 ἦρται.

There seems to be no exact parallel to the name Πότῃ which we have restored in the text. Πόττις and also Πόττεις occur as female names in Lycia.¹⁵ Coins of Dionysopolis in S. Phrygia have the inscription Ζεὺς Ποτῆος,¹⁶ and Ζεὺς Ποτῆς or Ποτέως is found at Baldur,¹⁷ while Ποτείτου occurs on coins of Hadrianapolis.¹⁸ The remains of the letters in the present case best suit the above reading, but the name cannot be taken as certain.

Ἀλίῃ is found as a woman's name in Egypt,¹⁹ and recalls that of the island Ἄλινα off the coast of Lycia.²⁰

The relationship of the persons mentioned seems to be as follows:—



¹⁵ *Epist.*, II. No. 174; *J.H.S.* xv. p. 125. p. 335.

No. 14.

¹⁶ *Ramsey*, *op. cit.* i. p. 126.

¹⁷ *Ramsey*, *op. cit.* No. 178; *B.C.H.* 1879.

¹⁸ *B.H.G.* Phrygia, p. 225, No. 1 *segg.*

¹⁹ Berlin, *Neues Museum*, No. 11,416.

²⁰ Steph. Byz. s.v. Ἐπίς.

It is uncertain whether Aline is the daughter of Pote (?) by her first or second marriage. Kleisippos, who was probably dead at the time the monument was erected, seems to have been her son by her second marriage. Hermaskos the cousin of Hermodoros being named after his grandfather.

24. *Ib.* Round basis built into medieval wall on the N.E. of the acropolis. H. 41, circumference 1.65. Finely cut letters 0.25. Copy.

ΤΗΠΟΛΕΜΟΣΣΤΑΣΙΘΕΜΙΟΣ
ΚΑΙΛΥΚΙΑΤΕΙΘΩΝΟΥ
ΤΗΠΟΛΕΜΩΤΩΥΙΩΙ
ΗΡΩΙ

Τηπόλεμον Στασιθέμιον
καὶ Λυκία Τειθωνοῦ
Τηπόλεμον τῷ υἱῷ
Ἡρῶι.

For the name *Στασιθέμιος* cf. *Reisen*, ii. Nos. 87, 88. *Ib.* i. No. 41 the genitive is restored *Στασιθέμι[δος]*,¹⁰ where however there seems hardly room for three letters and probably *Στασιθέμιος* should be read, as in the present example.

25. *Ib.* Square basis to N.E. of acropolis. H. 1.14, B. .40. Letters .03. Copy.

ΧΑΙΡΕΤΕ
ΤΟΗΡΩΝΑΛΕΞΑΝΔΡΟΥ
ΤΟΥΚΑΙΔΙΑΥΣΗΤΙΚΟΥ
ΕΝΩΤΑΦΗΣΕΤΕΑΥΤΟΣ
5 ΚΑΙΗΓΥΝΗΑΥΤΟΥ
ΑΡΧΑΙΣΚΑΙ
ΟΝΗΛΕΥΘΕΡΩΣΕΠΙΚΤΗΤΟΝ
ΚΑΙΟΝΑΝΖΩΝΕΠΙΤΡΕΨΗ
ΕΤΕΡΩΔΕΟΥΔΕΝΙΕΞΕΣΤΙ
10 ΘΑΨΑΙΤΙΝΑΗΕΚΚΟΨΑΙΤΙ
ΤΩΝΓΕΓΡΑΜΜΕΝΩΝ
ΗΠΡΟΣΓΡΑΨΑΙΗΥΠΟΚΕΙΣΟΝΤΑ
ΟΘΑΨΑΣΚΑΙΟΑΝΥΨΑΣΚΑΙ
ΟΕΚΚΟΨΑΣΚΑΙΟΠΡΟΣΓΡΑΨΑΣ
15 ΠΡΑΓΜΑΤΙΤΥΝΒΩΡΥΧΙΑΣ
ΚΑΙΑΠΟΤΕΙΣΕΙΕΚΑΣΤΟΣ
ΑΥΤΩΝΤΗΠΟΛΕΙΞΠΕΝΤΑ
ΚΟΣΙΑΩΝΟΕΛΕΝΣΑΣΑΗΝ
†ΕΤΑΙΤΟΤΡΙΤΟΝ.

¹⁰ Cf. C. I. G. 4243 (at Thos).

- Χαίρετε.
 τὸ ἡρῶαν Ἀλεξάνδρο[ν
 τοῦ καὶ <δρ> Λύξητικου,
 ἐν ᾧ ταφίσαντε αὐτὸς
 5 καὶ ἡ γυνὴ αὐτοῦ
 Ἀρσάνους καὶ
 ὃν ἠλευθέρωσε Ἐπίκτητον,
 καὶ ὃν ἀν-ζῶν ἐπιτρέψῃ.
 Ἐτέρῳ δὲ οὐδενὶ ἔξεστι
 10 θάψαι τιῶν ἢ δεκῶσαι τι
 τῶν γεγραμμένων
 ἢ προσγράψαι, ἢ ὑποκείσθαι,
 ὁ θάψας καὶ ὁ ἀνέξας (sic) καὶ
 ὁ δεκῶσας καὶ ὁ προσγράψας
 15 πράγματι τυμβωρυχίας,
 καὶ ἀποτίσσει τῇ πόλει (ὀφειλόμενα) πεντα-
 κόσια, ὃν ὁ ἐλέγξας λήν-
 ψεται τὸ τρίτον.

The name *Διονύσιος* does not seem to occur elsewhere. Mr. G. F. Hill suggests that ΔΙ is a dittography after ΑΙ. For *Λύξητικός* cf. *C.I.G.* 4243 (at Tlos).

26. *Pl.* Square basis built into lower part of mediæval wall on the acropolis. H. c. 1.15, D. c. .50. Irregular letters c. '02. Copy.

- ΒΙΚΤΟΡΑΠΑΛΟΥ Α
 ΣΕΚΟΥΤΟΡΑ
 ΒΙΚΤΟΡΑΤΟΝ
 ΣΤΕΝΑΡΟΝ
 5 ΜΕ ΣΕΚΟΥΤΟ
 ΡΑΝΥΕΣΟΡΑ
 ΤΕΟΝΠΑΝ
 ΤΕΣΤΡΟΜΕ
 ΟΝΣΥΝΖΥΓΟΙ
 10 ΕΝΣΤΑΔΙΟΙΣ
 ΟΥΠΑΤΡΙΣΗΝ
 ΛΙΒΥΗΝΥΝΔΕ
 ΞΑΝΘΟΙΟΜΕ
 ΓΑΙΑΔΥΞΑΝΙ
 15 ΟΝΔΑΠΕΔΟΝ
 ΚΑΤΕΛΕΙΣΥΝ
 ΔΟΓΜΑΤΙΜΟΙ
 ΡΟΝΠΑΙΣΕΓΕ

- ΛΑΠΑΡΟΔΕΙΤΑ
 20 ΒΛΕΠΩΝΟΤΙ
 ΚΑΙΣΕΘΑΝΕΙΝ
 ΔΕΙ ΑΜΑΖΩ///
 ΒΙΚΤΟΡΙΑΝΔΡ|
 ΔΙΩΕΚΤΟΝ
 25 ΕΑΥΤΟΥΜΝΕΙ
 ΑΣΧΑΡΙΝΤΟΝΒΩ
 ΜΟΝ ΕΙΤΙΣΔΕΚΑ
 ΘΕΛΠΟΝΟΥΣΗΔΩΣΕΙ
 ΕΙΣΤΟΦΙΣΚΟΝ*Φ
 30 ///ΑΙΡΕΤΑΙΠΑΡΟ
 ΔΕΙΤΑΙ

 Βίκτορα πύλο(ν) [α']
 Σκοούτορα
 Βίκτορα τὸν | στεναρὸν | με·σεκούτο|ρα·νῦ(ν) ἑσπα|τέ,
 10 ὃν πάν|τες τρώμε|ον·σύνζυγοι | ἐν σταδίοις. |
 Οὐ πατήρ ἦν | Λιβὴν νῦν δέ | Ξάνθοῦ με | γαῖα,
 ἀύξασ|·ὄν δάπεδον, | κατέ(χ)·ει·σύν | λόγματι Μοι|ρ(ῶ)ν.
 20 Παῖζε, γέ|λα, παροδείτα, | βλέπων·δτι | καί σε θανεῖν | δεῖ.
 Ἰμαζά(ν)
 Βίκτορα ἀνδρὶ
 ἱβί(ν) ἐκ τ' ὧ(ν)
 25 ἑαυτοῦ μνεί-
 ας χάριν τὸν βο-
 μόν. Εἰ·τιν δέ κα-
 θέλ(κω)ν ὀρύξῃ, δώσει
 εἰς τὸ(ν) φίσκον (σημῖα) Φ'.
 30 Χ|αίρεται παρο-
 δείται.

The stone was lying on its side built into the wall with only the two last lines projecting. We were able to clear away the stones and mortar that covered the inscribed face by tunnelling into the wall, but the stone could not be completely freed without the destruction of a section of the wall. It was difficult to reach the top of the stone, and our reading of the first line is uncertain. Other difficulties of reading are due to the remains of mortar in the letters which could not be removed. We have to thank Mr. Tod for various references to other inscriptions of this character²⁰ and for assistance with the text.

* The principal see *C.I.G.* 2002, 2742. Also *C.I.G.* add. B: 2042b, 2042c (= Kaibel, *Epig. Gr.* 299, 291, *Rom. Mitt.* xv, pp. 27-28b). Kail and von Preussleben, *Beobacht. über die*

insid. Stein in Lykien (*Denkschr. der K. Akad. Wiss. Philos.-Hist. Kl. Lxx.*) p. 110, No. 212. *E. d. A.* xviii, p. 154, No. 50.

In line 1 we must almost certainly read $\pi\acute{\alpha}\lambda\alpha\varsigma$, the Υ of our copy being probably an error for \aleph . *C.I.G.* 2663 has $\Sigma\tau\acute{\epsilon}\phi\alpha\upsilon\omicron\varsigma$: : $\pi\rho\acute{\omega}\tau\omicron\varsigma$ $\pi\acute{\alpha}\lambda\omicron\varsigma$. *ib.* 3765 $\delta\epsilon\upsilon\tau\epsilon\rho\omicron\varsigma$ $\pi\acute{\alpha}\lambda\omicron\varsigma$ Μελάντιπον , *B.S.A.* xviii p. 158, No. 30, $\pi\rho\acute{\omega}\tau\omicron\varsigma$ $\pi\acute{\alpha}\lambda\omicron\varsigma$ $\rho\eta\gamma\iota\alpha\rho\iota\omega\upsilon$; cf. *Die Cass.* xxxii. 22 $\pi\rho\omega\tau\acute{o}\pi\alpha\lambda\omicron\varsigma$ $\sigma\epsilon\kappa\omicron\upsilon\tau\acute{o}\rho\omega\upsilon$, *Latpridius, De Commodis*, 15, *Palus primus secutorum*.²⁵ Forcellini s.v. *Palus*, dictum est ipse gladiator.

The Λ at the end of line 1 should be restored as Δ rather than Δ . The inscription published by Keil and von Premierstein (*loc. cit.*) has

ΑΜΦΙΑΡΑΟΣ
ΣΕΚ· Π Γ Ν Ι Δ.

which is restored by the editors:

$\sigma\epsilon\kappa(\sigma\upsilon\tau\omega\rho)$ $\pi\alpha(\lambda\mu\omega\upsilon)$ γ' , $\nu(\kappa\omega\upsilon)$ $\iota\alpha'$.

The more obvious $\pi\acute{\alpha}\lambda\omicron\varsigma$ γ' is rejected on the ground that, whereas a $\pi\acute{\alpha}\lambda\omicron\varsigma$ $\pi\rho\acute{\omega}\tau\omicron\varsigma$ (primus palus) and $\pi\acute{\alpha}\lambda\omicron\varsigma$ $\delta\epsilon\upsilon\tau\epsilon\rho\omicron\varsigma$ (secundus palus) are known, there is no definite evidence for a third rank ($\pi\acute{\alpha}\lambda\omicron\varsigma$ $\tau\rho\acute{\iota}\tau\omicron\varsigma$). Their quotation however of $\pi\alpha\langle\upsilon\rangle\lambda\omicron\varsigma$ $\tau\rho\acute{\iota}\tau\omicron\varsigma$ ²⁶ admits the possibility of a third or even a fourth rank. (Cf. $\Xi \Delta$ on the first of the reliefs published *Rom. Mitt.* xi. p. 99, Fig. 1.)

For $\sigma\tau\epsilon\upsilon\alpha\rho\acute{o}\varsigma$ = $\sigma\theta\epsilon\upsilon\alpha\rho\acute{o}\varsigma$ in line 4 cf. Herwerden s.v. Examples of this spelling (τ for θ) in Asia Minor are given by Woodward, *B.S.A.* xvi p. 127.²⁷

For $\sigma\acute{\iota}\omega\zeta\epsilon\rho\omicron\iota$ = $\sigma\acute{\iota}\omega\zeta\epsilon\gamma\omicron\iota$ in l. 9 cf. Herzog, *Griechische Forsch.* No. 123, $\mu\epsilon\lambda\eta\sigma\iota\varsigma$ $\kappa\alpha\iota$ $\delta\iota\sigma\kappa\alpha\tau\epsilon\iota\mu\epsilon\iota$ $\tau\omega\upsilon$ $\sigma\acute{\iota}\omega\zeta\epsilon\rho\omicron\iota$, where the word is certainly to be explained as by Herwerden (s.v.), $\alpha\gamma\tau\alpha\gamma\omega\rho\acute{\iota}\sigma\tau\eta\rho$, rather than *sodales* (Herzog). $\Sigma\acute{\iota}\omega\zeta\epsilon\gamma\omicron\iota$ must have been used of pairs of opposed gladiators.

In line 14 we can make nothing of $\alpha\acute{\iota}\xi\alpha\rho\iota\omega\upsilon$. It may be merely had Greek for $\alpha\acute{\iota}\xi\alpha\rho\omega\upsilon$, although the sense even then is not of the best.

27. Arsa, on a stone base lying on its face, letters 015. Copy.

ΒΑΧΧΙΣΤΡΟΚΟΝΔ	Βάχχης Τροκόνδην
ΕΡΙΤΩΠΑΤΡΙΤΡΟΚΟΙ	$\epsilon\pi\acute{\iota}$ $\tau\eta$ $\pi\alpha\tau\rho\acute{\iota}$ Τροκόνδην
ΛΑΤΡΟΚΟΝΔΟΥΤΟΥ	$\delta\eta$ Τροκόνδου τοῦ
ΝΕΙΚΟΜΗΔΟΥΗΡΩΙ	Νεικομήδου ἡρώϊ

L. 1. for the name Βάχχης , cf. Βάαχης (*C.I.G.* 843).

28. *ib.* Broken limestone block built into the wall of a house in the village. H. 26, greatest breadth (l. 4) 53. Letters carefully cut '02. Copy.

²⁵ Isidor, *Etymolog.* xviii. 53. Secutus ab interpretando, militumque plectus. Gestabat enim cuspidem et ensium plectum, quae adversarii lacum impediunt, ut autem illi ferretur ipsis, ipse interpretaret. Haec acutius

accipit sent Valerius.

²⁶ *ib.* *Mitt.* xl. p. 132, No. 91 = *LG.* ix. 2, 352.

²⁷ *E.g.* $\tau\epsilon\gamma\acute{\epsilon}\tau\eta\rho$ = $\theta\epsilon\gamma\acute{\epsilon}\tau\eta\rho$, $\tau\acute{\epsilon}\lambda\eta$ = $\theta\acute{\epsilon}\lambda\eta$, etc.

||||| Νεϋ - - -

ΚΑΔΟΒΟΡΙΣΓΚΑΤΑΤΟ

ΨΗΦΙΣΜΑΕΓΗΝΓΕΙΛΑ

ΤΟΣΑΝΕΥΔΟΣΕΩΣΑΡΓ|||

5 ΑΡΜΟΑΕΚΟΥΤΟΣΕΓΗΓΕΙΑ

ΤΕΥΣΕΙΝΑΝΕΥΔΟΣΕΣ|||

ΓΕΡΜΑΚΑΣΕΡΡΙΟΥΕΓΗΝΓΕΙ

* ΝΕΥΔΟΣΕΩΣΑΡΓΥΡΙΟΥ

||||| ΚΟΤΩΝΟΣΕΙΓΗ

10

- - -

α) νεϋ δόσεως ἀργυρίου

Καδόβορις γ' κατὰ τὸ - - -

ψήφισμα ἐπηγγέλματο - - -

- τος ἀνεν δόσεως ἀργυρίου

5 * Ἀρμόα Ἐκτοῦτος ἐπηγγέλματο ἱερα- (?)

τεύσειν ἀνεν δόσεως ἀργυρίου

Γερμάκας Ἐρπίου ἐπηγγέλματο - - -

α) νεν δόσεως ἀργυρίου

Ταύρης (?) Κότanos ἐπηγγέλματο -

10 - - ἀνεϋ δόσεως ἀργυρίου.

The inscription apparently is a list of persons, one of whom (l. 5) is a woman, undertaking, without remuneration, some public service, the nature of which is uncertain. For our restoration *ἱερα*-τεύσειν in ll. 5, 6 *γραμμα*-τεύσειν is equally probable.

The stone is broken so that it is impossible to be certain of the length of the lines, which may well have been uncut on the right, the proper name in each entry beginning the line as well as the clause. *δεκάπρω*-τος which has been suggested in ll. 3, 4 is a possible restoration, but unlikely. In any case it is improbable that -τος is to be regarded as part of a proper name. The entry in ll. 2-5 is fuller than the rest, but there is certainly one entry at least preceding it.

The chief interest attaches to the names.

Καδόβορις is a compound name, *Καδ-οβορις*. The first part = Cilician *Καδās* (Starratt, *W.E.* 61), *Κάδης* (*ib.* 138), *Καδέας* (*ib.* 296), cf. *Καδα-δουε* (Heberley-Wilhelm, *Reisen in Kilikien*, 190, cf. Starratt, *ib.* 63, 128). See further Buckler and Robinson, *A.J.A.* xvi pp. 33 seqq.

The second part -οβορις by a common vowel change = *abura*, cf. *Reisen*, i: 82 *Κιρδāsυρις* and *T.A.M.* 103, 125 *Katabura*. *Aboru* occurs as a common noun in *T.A.M.* 55, 2.

* *Ἀρμόα* is the feminine form of *Ἀρμάας*, a variant of *Ἐρμάας* (*Reisen*, i: 51) cf. *Ἀρματίας* (*ib.* li: 126) = *Ἐρματίας* (*ib.* i: 9), *Ἀρμαστα* (*ib.* ii: 223) = *Ἐρμαστα* (*J.H.S.* xv. p. 131). See further *A.J.A.* xvi pp. 30 seqq.

The name 'Εκτοῦς seems to be new; for the form of 'Αλλοῦς·οὔτος (B.S.A. xvi p. 115) and 'Επαφροῦς (No. 34).

Τερμύκακ is the most probable restoration in l. 7. It would probably be **terḡmaka*, formed like *kinaka*, *araka* (T.A.M. 125).

For 'Επτίας cf. J.H.S. xv, p. 122.

The noun Τόνης, which is suggested in l. 9, is not an uncommon one (cf. C.I.G. 4403, Lanckoronski, *op. cit.* ii. 280).

Κόττω does not seem to occur elsewhere. For Κοτίων cf. C.I.G. 7100.

29. Fellendagh. Letters 045.

↑ ϐ ϐ ϐ Ε Ι Α Ρ Ρ Α
 Α Ρ Ι Ν Α Ρ Λ ↓ Τ Τ
 ^ ^ Α + Α

The inscription was found in a stone-heap at the ancient site on the Fellendagh²⁴ near Andifilo (Antiphellus). The fragment seems to have been part of the architrave of a rock-tomb of the normal Lycian type, and lay almost in front of the small group of tombs illustrated by Spratt and Forbes.²⁵

The epitaph opens with the customary formula:

θεῖα ἀναστήα με τί πρὸς αὐτὸ . . .
 of T.A.M. 117: *θεῖα ἀναστήα²⁶ με τί*
πρὸς αὐτὸ εὐερία.
τὸ μνημα τὸδ' ἐπ.
σησασο Σιδάριος.

The line probably ended with the name of the maker of the tomb.

In line 2: *Arna[s]* is probably to be considered an ethnic following the proper name in the line above. The use of ethnics is uncommon in Lycian epitaphs, but an example seems to occur in No. 113, *ptta[ro]zi*.²⁷ Mr. Arkwright compares No. 82:

²⁴ I.e. the Tachukuring of T.A.M. 21. In *Jahrbuch*, iii. Tr. 1, *Beiblatt*, p. 60, Prof. Kallinka gives the ethnic *Arna[s]* as occurring in an inscription at the site, and suggests *Arna[s]* as the name.

²⁵ *Private in Lycia*, I. p. 70.

²⁶ The form varies between *ἀναστήα* (T.A.M. 117), ²⁷ 123, 125) and *ἀναστήα* (40², 117) Sundwall (*Klio*, 1911, 473) comments Kallinka (*Opuscule*, introduction with Lycian *ἀναστήα*). His interpretation of *ἀναστήα* as *ἀναστήα*, e.g. *ἀναστήα*, in the light of *ἀναστήα*, *ἀναστήα*, is unconvincing. Klinge's suggestion (*Monist.* xl. p. 16) that the word is to be connected with GL. *ἀναστήα* seems equally improbable. Mr. Arkwright gives as the following notes:—The word form *ἀναστήα*, not

brought into harmony, shows the word to be a compound, probably from *ἀνα* (*ana*) + *ἀναστήα* *ana*, 'in succession', and *ἀναστήα*, an adjective from *ἀνα*, 'with' or 'together'. The suffix *-α* forms a kind of collective, as in T.A.M. 21², *ἀναστήα* (*ana* + *ἀναστήα*: *ana* + *ἀναστήα* 'the upper row of benches', from *ἀναστήα*, a 'bench' (*anasthē*). The whole would mean 'a set (of burial places) to be held in common in succession', i.e. 'a hereditary family tomb'.

²⁷ This is the most probable explanation, although Klinge (*Mon. Arch. Gesch.* 1910, p. 36) suggests that the word may possibly be a proper name. No. 22, where *ἀναστήα* = *ἀναστήα*, *ἀναστήα* = *ἀναστήα*, is a dedication rather than an epitaph. In 20² Mr. Arkwright considers *ἀναστήα* as more probably a personal name.

uhube cerḡḡi[s] = habuduh tideimi,

cerḡḡi being a town apparently near Candyba. In the transcription of the inscription in *T.A.M.* the final *-s* is omitted, but Mr. Arkwright tells us that the upper and lower extremities of the *z* can be plainly seen on the paper cast; and less clearly in the published facsimile.

There is some uncertainty with regard to the final letter of *Arānus*. There is no example of the use of *C* for *s* in Lycian inscriptions, but it seems probable that the lower part of the letter is effaced and that we should read *ç*, which Mr. Arkwright tells us is the form used in No. 23, where the published facsimile incorrectly gives *ç*.

In No. 82 *habuduh tideimi*, which follows the ethnic, makes it probable that in the present example the letters *itt* - - - are to be regarded as the beginning of a patronymic, *itt*[- - - *h tideimi*]²⁰ The alternative suggestion *kti[hā]* (cf. Nos. 89, 90, 118) seems unlikely in the present context.

In the third line the letters are more widely spaced. The first two letters are probably *PE*, the most likely restoration being *awjahaḡi*, a word which occurs in Nos. 17, 20, 114, 115, and has received various interpretations.²¹

Mr. Arkwright has communicated to us the following explanation of the word. The suffix *-ai* is by denasalisation for *-ai*, which has a distributive meaning; cf. No. 107, *ai* *ladaḡ eittahi*, 'and their wives respectively,' 20, 39, *se ḡartai lada*, 'and their wives (are) their partners respectively,' 20, 11, (denasalised as in the present example), *adai*, 'a fee in every case.' *Awahai* would be formed from a noun **awaha* or **awahi*, which itself would be formed direct with the *-h*-suffix from the preposition or adverb *ḡḡḡ* (*ḡḡḡ*), 'with' or 'together,' (see above, p. 22). **Awaha* or **awahi* would mean 'something in common,' 'a common right,' or 'common-ownership,' and with the suffix *-ai* would mean 'shares in a common right,' or 'a part-ownership with others.'²²

Mr. Arkwright restores the line:

awjahaḡi miḡiti aludahali ada - .

In No. 69 Klinge connects *ḡahai* with Tyberian, but this is not certain; and in No. 43 he suggests that *ḡahai* may be an ethnic (from Tyberia), but in No. 32 *ḡahai tideimi* is certainly a patronymic. The use of the ethnic in the present example would be justified if a Xanthian were building the tomb in a foreign city.

²⁰ We transliterate *ḡ* by *ç*, following Mr. Arkwright, who regards *ḡ* as a syllable very nearly approaching the Lycian *ç*. (For his former view, see *Lebens*

Ante II. 85.)

²¹ For such names cf. *Kretschmer (Revue, II. 176)*, *Kretschmer (ib. II. p. 146, n. 2)*, *Kretschmer (J.H.S. xv. p. 112, 12, 25)*.

²² E.g. *Talp. Lybische Dialekte*, 34, as verbal substantive = *Schuldiger*. See further, Klinge, *op. cit.* pp. 49, 50.

²³ If, as is possible, the suffix *-ai* can also convey the sense of distribution over a space of time, *awahai* might be more simply rendered as 'joint-rights from time to time' or 'successively.'

¹ Part-rights respectively to the *mindis*²¹ for additional-future-permission for a fee of -.

30. Cyanee. On the panel of a sarcophagus to the left of the ascent to the acropolis. The panel measures H. 37. B. 76. Letters 035. Copy and impression.

ΤΟΝΤΑΦΟΝΚΑΤΕΣΤΗ
ΜΗΤΡΙΟΥΟΙΚΩΝΕΜΥΑΝ
ΣΥΝΒΙΩΚΑΙΤΕΚΝΟΙΣΚΑΙΕΓΓΟΝ
ΕΩΤΦΥΡΙΟΥΚΑΙΟΙΣΑΝΕΓΩΕΝΓΡΑΦΩΣΣΙ
5 ΧΩΡΗΣΩΑΛΛΟΣΔΕΜΗΔΕΙΣΕΝΚΗΔΕΥΣΑ
ΗΑΜΑΡΤΩΛΟΣΕΣΤΩΘΕΟΙΣΟΥΡΑΝΙΟΙΣΚ
ΕΠΙΧΘΟΝΙΟΙΣΚΑΙΟΦΕΙΛΕΤΩΤΗΚΥΑΝΕΙ
ΤΩΝΓΕΡΟΥΣΙΑΔΗΝΑΡΙΑΧΕΙΛΙΑ

Τὸν τάφον κατέστησεν ὁ δαίμων Δη-
μητρίου, οἰκῶν ἐν Κυανέαις αὐτῷ καὶ τῇ
συμβίῳ καὶ τέκνῳ καὶ ἐγγόνοις καὶ . . .
ΕΩΤΦΥΡΙΟΥ καὶ οἷς ἂν ἐγὼ ἐνγραφῶς στυ-
χάρησιν. Ἄλλος δὲ μηδαὶς ἐκκηδευσάτω
ἢ ἁμαρτωλὸς ἔστω θεοῖς οὐρανίοις καὶ
ἐπιχθονίοις καὶ ὀφειλῆτω τῇ Κυανει-
τῶν γερονσὶ ἀνάρια χεῖλια.

L. 2. Οἰκῶν ὧν, i.e. settled as *incola*.²²

We can find no parallel to the imprecation *θεοῖς οὐρανίοις καὶ ἐπιχθονίοις*. The common formula mentions the gods of the lower world alone,²³ or together with the *θεοὶ οὐράνιοι*.²⁴ Here it is more probable that we have to do with an error for *καταχθόνιοι*, rather than an allusion to the Hesiodic *δαίμονες ἐπιχθόνιοι*.²⁵

31. Sura. On a sarcophagus half an hour up the road to Giolbaghi, on S.W. of road by a tower. Letters 025.

(α) On the panel. Copy and impression.

ΤΟΜΝΗΜΕΙΟΝΚΑΤΕΙ ΕΥ ΓΕΝΑΘ
ΗΝΑΓΟΡΑΔΙΑΣΟΝΘΕΜΥΡΕΥΣΕΑΥΤ
ΩΚΑΙΤΕΚΝΟΙΣΚΑΙΤΟΙΣΕΑΥΤΩΝΚΑΙ

²¹ On the *mindis* cf. Lohr, *Mys.* ix. 221, and *Zeits.* ii. No. 17, p. 467. In *Zeits.* ii. No. 17, p. 467, the *mindis* is explained as *die Personlichkeit des Verstorbenen*. Mr. Arkwright explains it as the *wife of the heir, not of the deceased*. In *Zeits.* ii. 27, *Personen*, having no direct heirs, bequeathed his estate to his kinsmen, but such a bequest is most com-

mon.

²² Ramsay, *C. B.* ii. 471.

²³ ἁμαρτωλὸς ἔστω θεοῖς καταχθόνιοις (*C. I. G.* 4252 b, 4253, 4308, etc.).

²⁴ *C. I. G.* 4253, *ἐστὶν ἁμαρτωλὸς θεοῖς οὐρανίοις καὶ καταχθόνιοις*.

²⁵ Hesiod, *Op.* 122; cf. Rohde, *Psyche*, p. 671.

Ι·ΣΟΝΙΑΠΟΛΛΩΝΙΟΥΚΑΘΥΙΘ·ΕΣΙΑΝ
 5 ΔΗΜΗΤΡΙΟΥ· ΜΥΡΕΙΑΛΛΩΔΕΟΥΔ

 - - - ΤΗΣΠΑΝΓΕΛΙΑΣΟΥΣΗ
 ΑΝΤΙΤΩΒΟΥΛΟΜΕΝΩΕΠΙΤΩΤΡΙΤΩ

Τὸ μνημεῖον κατε[σε]κ[υ] [α]σεν [Γ]Αθ-
 ηναγόρας Ἰάσονος Μυρεῖς ἐαυτ-
 ῶ καὶ τέκνοις καὶ τοῖς ἐαυτῶν καὶ
 Ἠ[ά]σανι Ἀπολλωνίου καθ' υἱά[θ]ησίαν
 5 Δημητρίου . . . μυρεῖ ἄλλω δὲ αὐδ-
 [εῖα]

τῆς ἐπαγγελίας οὕση[ς] π-
 αντι τῷ βουλομένῳ ἐπὶ τῷ τρίτῳ.

(β) beneath. Copy and impression.

ΣΥΝΧΩΡ ΔΕΔΗΜΗΤΡΙΩΑΙΕ-ΥΛΟΥ
 ΑΡΝΕΑΤΗΤΩΚΑΤΑΣΚΕΥΑΣΑΝΤΙΜΟΥ
 ΤΟΜΝΗΜΕΙΟΝΤΕΘΗΝΑΙΑΥΤΟΝΕΙΣ
 ΤΟΜΝΗΜΕΙΟΝ

συνχωρ[ῶ] ἐκ Δημητρίῳ Αἰσ[χ]ύλου
 Ἀρνεάτῃ τῷ κατασκευάσαντι μου
 τὸ μνημεῖον τεθῆναι αὐτὸν εἰς
 τὸ μνημεῖον.

L. 3. Ἐαυτῶν presumably for αὐτῶν.

L. 5. The ethnic of Ἰάσωνος Ἀπολλωνίου is not quite certain: one would expect it to be Μυρεῖ, but there is a gap of about two letters between ΔΗΜΗΤΡΙΟΥ and ΜΥΡΕΙ. In this gap there were no traces of letters either on the original or in the squeeze, so it may be that the stone was too weathered at this point for the mason to use, and that Μυρεῖ is the right reading.

Ll. 6, 7 are to be filled up with ἐξὼν ἔσται ἐκκηδευθῆναι τινα ἢ ἐκταίσει κ.τ.λ. or a similar formula.

The Jason adopted by Demetrius is probably a nephew of Athenagoras, for we may suppose his adoptive father to be the Demetrius mentioned in the postscript, who from the context would be a contemporary of Athenagoras. The elder Jason gave both his sons Olympian names, and his grandson was named after him.

32. 1b. On a sarcophagus by the last, a large jagged hole in its side. Letters irregular, 93-935. Copy and impression.

ΤΟΝΤΑΦΟΝΚΑΤΕΣΚΕΥΑΣ
 ΕΝΕΝΒΡΟΜΟΣΒΤΟΥΔΙΟΝΥΣΙ
 ΟΥΕΑΥΤ@ΚΑΙΤΗΓΥΝΑΙΚΙ
 ΜΟΥΠΑΡΘΕΝΙ@ΔΙΟΝΥΣΙΟΥΚΑΙΤ@
 5 ΠΑΤΡΙΜΟΥ///ΕΝΒΡΟΜ@ΔΙΟΝΥΣΙΟΥ
 ///////////////////////////////////ΥΚΑΙΖ@ΣΙΜ-
 ΕΝΒΡΟΜ Τ@ Δ-Λ
 ΞΕΝΒΡ
 ΗΞΗΡΑ
 ΠΛ ΡΟ
 Η ΕΝΤΑΥΘΑ
 ΗΕΚΤΙΣ ΕΡΟΥΣΙΑ////
 ΤΗΣΠΡΟΣ ΗΣΠΑΝΤΙΤ@ΒΟΥΛΟ
 ΜΕΝ@ΝΕΠΙΤΩΗΜΙΣΙ

Τὸν τάφον κατεσκεύασ-
 εν Ἐνβρομος β' τοῦ Διονυσί-
 ου αὐτῷ καὶ τῇ γυναικί
 μου Παρθένῳ Διονυσίου καὶ τῷ
 5 πατρὶ μου Ἐνβρόμῳ Διονυσίῳ
 καὶ τῇ μητρὶ . . . τῇ² καὶ Ζωσίμῃ
 Ἐνβρόμου . . . τῇ [α] [ε] [λ]
 φῶ] . . . Ἐνβρ . . .
 . . . ΗΞΗΡΑ
 10 . . . ΠΛ ΡΟ
 . . . ἐταυθῇ
 ἡ ἐκτίσθη τῇ . . . ἡρουσία . . .
 τῆς πρὸ ἀφ' ἧς οὖσ' ἦν παντὶ τῷ βουλο-
 μένων (εἰς) ἐπὶ τῷ ἡμίσι.

L. 2. Ἐνβρομος is a common name in this part of the world, e.g. at Sura on the dedications of Apollo Sarius, Ἐνβρομος β' ὁ καὶ Ζωσίμος β' Μηνοδότου²² (possibly a relation of the family here in question, cf. l. 6).

L. 4. For Παρθένιον as a woman's name cf. *Reisen*, vol. ii. No. 255, Κλαυδία Παρθένιον γυναικί.

L. 6. The restoration of l. 6 is uncertain and of 7-10 hopeless, for the blank left after ΜΟΥ in l. 5 shows that already at the time the inscription was cut the stone was in parts too bad to be used, and this flaw possibly spread into the lines below. The restoration suggested is perhaps the most plausible, for obviously l. 6 must contain the mother's name, and if Ζωσίμη were the name of a sister we should expect τῇ ἀδελφῇ before it, as we get the relationship expressed in ll. 5 and 8.

L. 12. Presumably the ἡρουσία of Myra is meant. Cf. *Reisen*, ii. 77

²² Helmsley and Kalinka in *Inschriften aus der K. Akad. zu Wien*, xlv, p. 16, No. 49.

(from Dembra), τῇ Μυρέων γερονσίῳ, but the exact formula is uncertain, there would hardly be room for ΜΥΡΕΩΝ before ΓΕΡΟΥΣΙΑ even if ligatured unless the cutter wrote ἐκτίσι, cf. below l. 14, ἐπὶ τῷ ἡμίσι.

L 13. On the stone the sixth and seventh letters were copied (doubtfully) as Θ and Σ, but there is not room for προσαγγελίας or προσγραφῆς. For the restoration proposed cf. *Bericht*, p. 18, No. 58, τῆς πράξεος οὕσης παντὶ τῷ βουλευμένῳ (from Sidschak).

33. *Dembra* (Myra), on a broken Ionic architrave built into a wall of a field near Hagios-Nikolas. Letters 06. Copy and impression.

ΕΙΜΗΤΗΣΔΙΑΒΙΟΥΠΑ	τειμητῆς διὰ βίου πατὴρ πατρίδος
ΥΙΔΙΟΥΚΑΙΑΝΤΙΣΤΡΑΤΗΓΕ	ΥΙΔΙΟΥ . . . καὶ ἀντιστρατήγου . . .

L. 1. *τειμητῆς διὰ βίου* = *consul perpetuus* and must refer to Domitian, the only emperor to bear that title. Cf. (at Phaselis) *Αὐτοκράτωρ Καίσαρ Οὐδίασσιανῶς υἱός [Δομετιανός]* . . . *τειμητῆς διηνεκῆς πατὴρ πατρίδος*.³³

L. 2. The governor mentioned is probably Gaius Caristanius Fronto, of whom we hear only in four other inscriptions.³⁴ In the last of these (if the restorations of Domitian and Caristianus are correct) we find that he supervises the erection of a *stoa* to Domitian.

The general form of the inscription is not clear; the nominative in L. 1 suggests that Domitian, whose name and style would have appeared in full, was the donor of a building erected under the care of the legate (*διὰ Καριστιανίου . . . ἀντιστρατήγου* *vel* *εἰναι*). On the other hand ΥΙΔΙΟΥ suggests *ἐκ τοῦ ἰδίου*, yet if this be accepted, the *καὶ* is awkward. ΛΟΥΙΔΙΟΥ³⁵ as a proper name is impossible, there being no cognomen.

34. *Id.* Square limestone base, in a field near the monastery, just inside the wall. Letters 03. Copy.

ΝΑΡΚΙΣΣΟΣΚΑΙ	Νάρκισσος καὶ
ΑΛΕΞΑΝΔΡΟΣ	Ἀλέξανδρος
ΟΙΤΕΙΜΗΤΙΚΟΥ	οἱ Τειμητικῶ
ΤΟΥΕΠΑΦΡΟΥΤΟΣ	τοῦ Ἐπαφροῦτος
5 ΑΙΔΙΑΛΕΞΙΩΝΟΣ	5 [π]αιδὶ Ἀλεξιάνῳ
ΦΥΣΕΙΚΑΛΛΙΚΡΑ	φύσει Καλλικρά
ΤΟΥΤΗΜΗΤΡΙ	τοῦ τῇ μητρὶ (sic)

L. 3. We can find no other example of *Τειμητικός* used as a name, or of Ἐπαφροῦς, though the formation of the latter is common enough in this part of the world, cf. Ἐκτοῦτος in No. 28 (q.v.) and Ῥαδοῦς, Ἀμμαροῦς at Olympus.³⁶

L. 5 the omission of the mother's name is curious.

³³ *I.G.* ad *Ros. Epist.* pect. III, 755.

³⁴ *Id.* Nos. 806, 812, 855, 129 (7).

³⁵ Cf. ΑΥΓΙΑΙΟΝ ΦΙΡΜΟΝ a legate of the Flavian period (ib. 725 at Myra).

³⁶ *B.O.H.* xvi. Nos. 29, 88. The name Ἐπαφροῦς, however, is found *O.I.G.* 5034, where it is probably genuine (see Pappe-Schneider, *op. cit.*)

35. *Ib.* Fragment in the courtyard of the monastery of Hagios Nicolas. Letters 03. Copy and impression.

ΙΤΡΙΩ	Δημητρίω
ΜΩΝΟΣ	- - μωνος
ΝΟΙΣΑΥΤΩ	τέκνονε αὐτῶν
ΑΤΗΘΡΕΠΤΗΣ	.. α τῇ θρεπτῇ Σ
5 ΤΗΙΕΞΕΣΤΩΤ	5 ἄλλω δὲ οὐδενὶ ἐξέστω ταφῆμαι
ΕΙΛΕΤΟΘΘΑ	ὁφείλετω ὁ θαύσας - -

36. *Ib.* Fragment in the same place. Letters 03. Copy and impression.

ΝΗΜΕΙΟΝΑΥΡΗΛΙΟΥ	Μημεῖον Αὐρηλίου
ΝΔΡΟΥΝΑΝΝΗCΜΥ	.. ἀνδρου Νάννης Μυρέως?
ΤΑΙΜΕΤΑΥΤΟΥΚΑΙΑ	.. ται μετ' αὐτοῦ καὶ Ἄ...
ΗΝΕΙΚΙΟΥΑΛΥΡΕ	.. η Νεκίου Μυρέως.

L. 2. *Αὐρηλιος* . . . *ανδρος* is presumably the son of *Νάννη*, otherwise one would expect *καὶ* between . . . *ανδρου* and *Νάννης*, and *μετ' αὐτῶν* in place of *μετ' αὐτοῦ*. The use of their mother's name instead of the father's is noteworthy, unless the owner was originally a slave whose father's name was unknown.

L. 3. . . *ται* should be completed as *ταφῆσεται* or similar word. The form of the inscription with the builder's name in the genitive is unusual.

37. Andraki, on the panel of a sarcophagus above the path to Myra, 5 minutes from the granary. Letters 02 (1st line 025). Copy.

ΑΥΡΗΛΙΕΜΗΤΡΟΔΩΡΟΣΣΕ
ΒΑΣΤΩΝΑΠΕΛΕΥΘΕΡΟΣΟΡΙΑΡΙC
ΖΩΝΦΡΟΝΩΝΕΑΥΤΩΚΑΤΕCΚΕΥΑ
CΕΤΗΝCΩΜΑΤΟΘΗΚΗΝΚΑΙΤΗΓΥΝΑΙ
ΚΙΑΥΤΟΥΑΥΡΗΛΙΑΚΛΕΟΠΑΤΡΑΚΡΑΟΥC
ΑΛΛΩΔΕΟΥΔΕΝΙΕΞΘΝΕCΤΑΙΕΝΚΗΔΕΥΘΗ
ΝΑΙΕΠΕΝΛΟΙΕΙΤΩΙΕΡΩΤΑΤΩΤΑΜΕΙΩ
*ΒΦ

Αὐρηλι(ο)ς Μητροδώρος Σε-
βάτων ἀπελευθέρως ὁριάρ(ο)ς
ζῶν φρονῶν εαυτῷ κατεσκεύα-
σε τὴν σωματοθήκην καὶ τῇ γυναι-
5 κὶ αὐτοῦ Αὐρηλία Κλεοπάτρα Κράου
ἄλλω δὲ οὐδενὶ ἐξόν ἐσται ἐνκελευθῆ-
ναι ἐπεὶ δῶσ(ε) τῷ ἱερωτάτῳ ταμίῳ
δημίῳ βφ.

L. 5. We can find no parallel for the name Κράης; and the reading of two letters was uncertain. Heavy rain prevented our making an impression.

L. 7. The restoration is not quite certain, but that it must be something of the kind is shown by two inscriptions from Cibyra⁴¹ ἐτέρῳ δὲ οὐδενὶ κ.τ.λ. ἐπεὶ ἀποδώσει τῇ κρατίστῃ βουλῇ κ.τ.λ. and ἐτέρῳ δὲ κ.τ.λ. ἐπὶ θήσει (sic) τῇ φόρῳ. For the ἱερωτάτου ταμείου (i.e. the fiscus) see references in Cagnat, *I.G. ind. Res. Rom. part. iii.* 11.

Aurélius Metrodorus was doubtless attached to the great granary which Hadrian built at Andriaki. Another ὀρεάριος is the dedicator of a late relief at Kekovah.⁴²

38. Corydalla. On a lintel, broken at the top and right-hand side, half buried in the Turkish cemetery at the foot of the acropolis. Letters 015-02. Copy.

ΑΙΙΟΥΣΘΗΡΙΙΙΙΙΙΙΙΙΙΝΝΩΕΠΙΚΤΗΤΩ· ΜΙΑΘΑΛΛΩΛΥΣ
ΛΕΟΝΤΙΔΙΤΗΚΑΙΣΕΡΑΠΙΑΔΙΚΑΙΤΟΙΣΤΟΥΤΩΝΤΕΚΝ
ΑΛΛΩΔΕΟΥΔΕΝΙΕΑΝΜΗΤΙΝΙΕΝΓΡΑΦΩΣΣΥΝΧΩΡΗΣ
ΤΙΣΕΤΕΡΟΝΘΑΨΗΤΙΝΑΟΦΕΙΛΕΣΕΙΘΕΩΜΕΓΑΛΩΣ
5 ΟΔΕΕ ΝΣΑΣΙΙΙΙΙΙΙΙΗΝΨΕΤΑΙΤΟΗΜ

[καὶ τοῖς τέκνοις]

αἰῶ-ῶ Σωτήρ[ι]χῶ· Νάννος Ἐπικτήτῳ Ἐρμῇ Θάλλῳ Λύσῃ . . .
Λεοντίδι τῇ καὶ Σεραπίδι καὶ τοῖς τούτων τέκνοις μύνοις,
ἅλλῳ δὲ οὐδενὶ ἐάν μὴ τινι ἐγγράφῳς συγχωρήσω ἐγὼ ἐάν δὲ
τις ἑτερον θάψῃ τινα ὀφειλέσει θεῷ μετὰ τῷ Σ[ω]ζούτῃ . .
ἢ δὲ ἔλκε[ρ]ας . . λήνψεται τὸ ἡμῶν.

The name of the builder of the tomb does not appear; if the restoration of the first line is correct it contains the names of his children. Σωτήριος is not an uncommon name, cf. *I. G. ind. Res. Rom. part. i.* No. 372, but the restoration is not certain; on the stone the letter after the ς looked more like a γ. Νάννος occurs at Thera.⁴³ Ἐρμῆ is not rare in Asia Minor, cf. Dittenberger, *O. G. I.* No. 481, l. 5. For Θάλλος cf. *I. G. ind. Res. Rom. part. i.* No. 729.

L. 4. Σαῶν⁴⁴ is a mounted deity well known in Lycia and connected with Kakashon (see No. 1). He appears on coins of Arycanda, Chama, and possibly Cymene.

L. 5. Presumably some compound form of λαμβάνω, e.g. παραλήν-ψεται.

⁴¹ *Revue*, p. 6, Nos. 13 and 16.

⁴² *C.I.G.* 4531. Ἡρώδης ὁρεάριος χορηγεῖται
καὶ τὰς τοῖς θεοῖς δαίματα.

⁴³ *C.I.G.* 542.

⁴⁴ For Σαῶν see Hill in *J.H.S.* 1895, pp. 129, 130, and references there.

39. Deliktash (Olympus). On a broken limestone block. Height 37, breadth 54. Letters 03. Copy.

ΔΟΝΟΣΟΛΥΜΠ	[ὁ δαῖνα Σαρπή/-]
ΚΑΙΜΥΡΕΥΣΚΑΙΤΑΩΕ	δοῖνς Ὀλυμπ[ητός]
ΝΕΙΚΗΣΑΣΚΑΤΑΝΔΡΩΝ	καὶ Μυρεῖς καὶ Τλωεῖδες
ΠΑΛΗΝΕΝΔΟΞΩΣΘΕ	νεκῆσας κατ' ἀνδρῶν
5 ΜΙΔΟΣΕΒΔΟΜ-ΙΣΕΚΔΩΡΕ	πάλην ἐνδόξως θέ-
ΑΣΑΡΕΜΟΥΣΗΣΚΑΙΩ	5 μῖδος ἐβδόμης ἐκ δωρε-
ΠΑΥΑΣΑΝΤΙΜΑΧΟΥΤ	ας Ἀρτέμους τῆς καὶ
ΚΑΛΛΙΚΡΑΤΟΥΣ	Παύας Ἀντιμάχου τ(οῦ
	καὶ) Καλλικράτους

L 1. Σαρπή[δονος] is a probable restoration, for the name is common in Lycia.

L 5. For Artemis as a name at Olympus cf. Bérard, *BCH.* xvi. Nos. 67, 72; and for this particular form of declension of the dative Μείτι τῇ καὶ Ἀρτέμει;⁴⁰ generally the nominative ends in -οός and the genitive in -ούτος.⁴¹

L 6. For the name Παύς cf. Bérard, *ib.* No. 54, and an inscription of fourth cent. B.C. at Cosma.⁴²

40. *Id.* On lintel of built tomb, on the left bank of the stream.

Αὐρ[ηλίου] ὁ Ζώσιμος Πεισι[θ]ε[ι]ας τὸν
τῦμβον κατεσκεύασεν ἑαυτῷ
καὶ) [τῇ γυναικὶ καὶ) τέκνοις καὶ) τοῦτων
τέκνοις] τε καὶ) ἁ[γ]γυῖνι- ἐτέρῳ δὲ οὐ-
5 δὲν ἐξέσται κηδεύσαι τινα ἢ ἁ[π]οτεῖσ-
άτω τῇ ἱερωτάτῳ] ταμείῳ (δηνάρια) φ'.

Letters ΑΞΣΩ; in the first four lines they measure 04, in the last two 02. Κ is used for καὶ throughout, so that probably in line 3 the original reading was ΚΗΓΥΝΑΙΚΙ rather than ΚΑΙΓΥΝΑΙΚΙ. In line 1 possibly Κ has been omitted between the Ο and Ζ, so that we should read Αὐρ[ηλίου] ὁ καὶ Ζ.

41. *Id.* On the lintel of a tomb beside the last. The lintel measures 05 and 10.

Διονύσ(μου) Δημητρίῳ κατεσκεύασα
τὸν τῦμβον ἑαυτῷ καὶ τέκνοις καὶ ἐκ-
γούνοιν- ἐτέρῳ δὲ οὐδενὶ ἐξέσται κηδ-
εύσαι τινα ἢ τεύσαι (εἰν) τῇ πόλει (δηνάρια) φ'.

Letters ΔΕΗΣΩ, measuring 03.

⁴⁰ Holmsted and Kallika, *Doct. de K. Akad.* in *BCH.* xlv. p. 27, No. 28.

⁴¹ Bérard, *ib.*

⁴² Holmsted and Kallika, *ib.* p. 31, No. 31.

42. *lb.* Near the last on lintel measuring .94 in length.

Αὐρ(ηλίου) Ἀρπᾶλον Κ[ό]νωνος τρίς
Ὀλυμπ[ι]οῦ τὸ μνη(μ)εῖον.

Letters 025, forms as in preceding.

There seem to have been no letters in line 1 to the left of ΑΥΡ. The name Κόνων occurs elsewhere at Olympos (*J.H.S.* vi p. 361, No. 138). In l. 2 the stone has ΤΟΜΝΕΙΟΝ. For Ἀρπᾶλον (cf. No. 18 at Tlos) perhaps we should read Ἀρπᾶγον.

43. *lb.*

Αὐρ(ηλίου) Πανσαρίας Ζηνοδότου [τ]οῦ καὶ [-----] Ὀλυμπι-
νος κατασκεύασα τὸν τύμβον αὐτῷ καὶ τῇ [γ]υναικί μου Εὐθί-
νῃ καὶ τέκνους καὶ ἐγγόνους· ἐτέρῳ δὲ οὐδενὶ ἐξέστω
κηδεύσθαι τινα ἐντός, εἰ μὴ [ἐγὼ] ἐνγραφῶς ἐπιτρέ-
πω, ἢ ὁ βιασάμενος ἐκτίσει τῷ ἱερωτάτῳ ταμίῳ (δηνάρια), αἴ-
δων ὃ ἐλέγξας λήψεται τὸ τρίτον.

Letters ΑΞΞΥΩ, measuring .025.

The first line is very much worn and it is impossible to be sure about the name Πανσαρίας, with which the remains of the letters seem to agree.

44. *lb.*

Κατασκεύασεν τὸν τύμβον
Πίγγραμος Τροαάνδου Ὀλυμπινός· εὐ-
τῷ [καὶ τῇ] γυναικί αὐτοῦ Κοσμία Πισιδίᾳ καὶ τέκ-
νους [καὶ ἐγγόνους]· ἐτέρῳ δὲ οὐδενὶ ἐξέστω κηδεύθην-
αι, ἢ ὁ κηδεύσας τινα ἐκτίσει τῷ Ἡφαίστῳ (δηνάρια), αἴ-
δων ὃ ἐλέγξας λήψεται τὸ τρίτον, ἐκτός εἰ μὴ τινα ἐγὼ ἐν-
[γραφῶς] ἐπιτρέψω.

Letters ΑΞΞΣΥΩ, measuring .03.

For the name Πίγγραμος see *Reisen*, ii. Nos. 179, 180.

45. *lb.*

Μ(ἄρκου) Αὐρ(ηλίου) Δημήτριος Ἀν(τ)όχου [Ὀ]λυμπι-
νὸν τὸν τύμβον κατασκεύασε μίθι Δημη-
τρίῳ καὶ Εὐφῇ Δημητριάτῃ καὶ συντρό-
φῳ μου Δρακόττι Νακωτίῳ· ἄλλῳ δὲ οὐκ ἐ-
ξέστω ἐκηδεύθηναι εἰ μὴ τῷ ἐγὼ ἐνγραφῶς
συνχωρήσω· εἰ δὲ τις ἐκβιάσθῃται, δώσε τῷ φίλῳ
(δηνάρια) αἴδων ὃ ἐλέγξας λήψεται τὸ τρίτον.

Letters ΑΕΞΩ.

L. 4. Νακωτίος is probably an ethnic (cf. Ἀζώτιος, Βανθρώτιος) from a town Νάκωτος or Νάκωτον, which can, however, have hardly been in Lycia.

46. *Il.*

----- Αὐρ(ήλιος) Βάσσος Ἀρτεμ-----
 --- σε Ὀλυμπιῶν ἐαυτῷ καὶ γυναίκει καὶ τέ-
 τήσιν αὐτῶν] καὶ Φιλομένῃ
 ----- καὶ [εἰ τι ἐνγραφῶς ἐπίταρ-
 5 ψω, ἐτέρῃ δὲ οὐδενί, ἢ ὁ διασώ(με)νος κηδεύ-
 σαι τινα ἐκτείσε[ι] | ε[ρ]ῶ θεῷ Ἡφαῖστ[ῳ]
 ὁνάρια φ' ὧν ὁ ἐλένης λι[ν]ψεται τὸ γρίται.

For the formula in l. 6 cf. Bécard, No. 33.

For the name Φιλομένη cf. Bécard, No. 33, Φιλομένη Ἐρμαίου and Φιλομένον (above, No. 18).

47. Tutumluk. On the panel of a sarcophagus standing with three others above the road. Letters 03. Copy and impression.

ΑΥΡΜΗΝ -- Η -- Μ	Αὐρ. Μη(η...) ης Β') Μ[η]
ΝΟΔΩΡΟΥΚΑΤΕΕΚΕΥ	νοδώρου κατεσκευ-
ΑΣΕΝΤΗΝΕΩΜΑ	ασεν τὴν σωμα-
ΤΟΘΗΚΗΝΕΑΥΤΩ	τοθήκην ἐαυτῷ
5 ΚΑΙΤΗΓΥΓΝΑΙΚΙΜΟΥ	5 καὶ τῇ γυναικί μου

L. I. Μηνομένης or Μηνοφάνης or Μηνοχάρης are obvious alternatives. It is probably Β' Μηνοδώρου and not τοῦ, for there must be a Σ after the Η and there is not space for much more than one letter.

48. Kodjakeni. On the panel of a sarcophagus with sculptured bosses. Letters 02. Copy and impression.

ΕΡΜΑΔΙΣΜ·ΛΕΟΥΣΦΛ	Ἐρμᾶν δις Μ[η]λέους ΦΛ
ΑΠΟΠ Α////////ΕΝΔΟΥ	ΑΠΟΠ Α-----ΕΝΔΟΥ
ΚΑΤΕΕΚ////////ΝΤΗΝ	κατεσκευ[άσεν] τῇ
ΕΩΜΑΤΟΘΗΚΗΝΕΑΥΤ	σώματοθήκην ἐαυτ-
5 ΩΚΑΙΤΗΓΥΝΑΙΚΙΜΟΥ	5 ὃ καὶ τῇ γυναικί μου
ΔΗΜΗΤΡΙΑΚΑΡΠΟΥ	Δημητρία Καρπού
ΕΑΥΤΟΙΣΜΟΝΟΙΣ	ἐαυτοῖς μόνοις.

1, 2. We cannot find a satisfactory restoration for this line; on the stone there seems to be the first upright of a square letter after the Α, while ΕΝΔΟΥ at first sight would point to some form of Τρέβενδα, cf. Τρεβεν-δάτης in l. 2 of No. 49. Then the whole would read ἀπὸ πόλεως Τρεβενδ(ω)⁴⁶ and the last letters of the first line might be an abbreviation for Φασηλείτης, cf. Φασηλείτιδι in l. 5 of the companion inscription No. 49.

⁴⁶ Cf. Bécard, II. 111. Εὐνύχου Μυρίας ἀπὸ Τρεβένδης.

BUT our copies show no hesitation about the final ΟΥ and the other letters may conceal a name such as Φλα. Ποπιλ²⁰ . . . , if so, ἐνδορ may be suggested for the last five letters. To judge by No. 49 we should expect some indication of origin, so perhaps the first alternative is to be preferred.

49. Kodjakeui. On the panel of a sarcophagus near the last: to left and right of the panel a female and male bust. Letters 03. Copy and impression.

Α	ΛΕΟΥΣΤΕ	Α . . . Μο]λέους Τρε-
ΒΕ	ΚΑΙ	Βε[νδάρης] κα[τεσκεύασ-
Τ	ΑΥΤΩ	ε τὸν] τ[ύμβον] ? ἐ]αυτῇ
ΚΑΙΤΗΓΥΝΑΙΚ		καὶ τῇ γυναικί - - -
5 ΕΡΜΑΙΟΥΦΑ ΗΛΕΙΤ		5 Ἑρμαίου Φα[σ]η[λ]ειτ[ι]-
ΔΙΕΑΥΤΟΙΣΜ		δι' αὐτοῖς μ[έ]λοις.

L 1. A relative, probably uncle, of the Ἑρμας of No. 48.

L 2. For the form of the ethnic cf. *I.G. ad Res Rom. part. iii.* 704 l. 10.

L 3. The line is too fragmentary for the restoration to be absolutely certain.

50. Kodjakeui. On the broken panel of a sarcophagus near the last. Letters 03. Copy and impression.

ΓΥΝΕΚΙΑΥΤΟΥΑΥΡΝΑΝ	ὁ δὲῶτα κατεσκεύασεν τὸν τύμβον
ΚΑΙΤΕΚΝΟΕΜΟΙΑ	ἐαυτῇ καὶ τῇ ?
ΕΡ - ΕΦΚΝΔΗΜΗΤΡΙ	γυνεὶ αὐτοῦ Αὐρ. Νάε -
ΟΥΚΕΠΟΥΓΑΡΙΟΥΑΥΡ	νῆ] καὶ τέκν[ος] μ[ου] Αὐ[ρ].
5 ΚΙ - ΝΙΛΑΕΑΥΤΟΙΕΜΟ	Ἄρ]ετῇ [κί] Σώσ[ης] Δημητρί-
ΝΟΙΣ	ον καὶ τῇ θυγατρὶον Αὐρ.
	5 Ναυ[ε]ῖ]λῃ αὐτοῖς μ[έ]-
	λοις.

L 3. Ἀπετῇ is a possible name and contains just the right number of letters. The next name is not quite certain, our copies give Ν as the last letter and it was not clear on the impression; Σώσος²¹ occurs, but the feminine seems to be new.

L 4. The grammar is remarkable but every letter was plain on the stone and the impression; we have already had ποί for μου in l. 2.

L 5. As the first letter looked like Ν on the impression and Ν on our copies is probably for Ν on the stone, the name Νάωνη above renders the reconstruction here given tolerably certain; for Ναυῆλεις cf. Woodward.

²⁰ Cf. Dittenberger, *O.G.I.* No. 636.
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²¹ At Ancyra, *I.G. ad Res Rom. part. iii.* 175.

B.S.A. xvi, p. 114, No. 6; the form here used is remarkable, but the Δ was certain on both stone and impression.

H. A. ORMEROD.

E. S. G. ROBINSON.

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COINS FROM LYCIA AND PAMPHYLIA

[PLATE I]

THE following list of coins bought on our journey may be of interest as showing what the currency of the districts must have been. Only Greek coins are here treated; of Roman coins it was noticed that denarii rarely occur earlier than Trajan, after whom they become increasingly common, while the copper hardly appears till the second quarter of the third century.¹

Where the coin has already been described in any of the British Museum Catalogues, the *Inventaire de la Collection Waddington*, Linhoof-Blumer's *Monnaies grecques*, *Griechische Münzen*, *Kleinasiatische Münzen*, or *Zur griechischen und römischen Münzkunde* references are given to those works.² Where the coin is a minor variety of one described in any of these works, the reference is preceded by 'as' and followed by the point of difference. When the coin seems to be new or to call for fuller treatment the number is printed in heavy type and a description given at the end. The provenance of each piece is added in brackets, modern names (except such as Makri, Adalia, Elmaly) being as far as possible avoided; for example if a coin was obtained within two or three miles of a classical site the name of the site is given.

But it must be borne in mind that a coin is often bought some way from the place where it was found. There are three classes from whom coins were obtained, (α) money changers and dealers in the larger towns, (β) people moving up and down the main roads, (γ) the peasants themselves. As a rule class (β) buys from (γ) and (α) from both, so that the information is proportionately inexact. In the districts traversed there were three main roads, Adalia-Istanos-Elmaly, Phineka-Elmaly and Makri-Elmaly, and the provenance of coins bought upon them is marked accordingly.³

¹ At Kalamaki we came across what looked like the remains of a hoard of Roman \mathcal{E} of Gordian III., Traquillina, Maximianus; possibly part of the find noted by Woodward (*B.S.A.* xvi. p. 133) at Elmaly.

² Referred to as *B.M.C.*, *Wald.*, *Lin.*, *Lin.*, *Lin.*, *Lin.*, respectively. Occasional

references have been given to Raab's *Traité des Monnaies* and to Mordant's *Catalogue of the Hunterian Collection (Hunt.)*.

³ A certain number of coins (marked with an asterisk) were purchased on a subsequent journey undertaken by Mr. Ormerod alone in Pisidia and Eastern Pamphylia.

THRACE (?).—*Hadrianopolis*, 1: *Commodus* (Castelloryzo).

LESBOS.—*Methymna*, 2: 4th cent.⁴ as *Hunter* 7, but on obv. in countermark (α) pomegranate; (β) lyre (Adalia). See Pl. I.

CARIA.—*Uncertain*, 3: 6th cent. *R. Traité*, 2^{ème} partie, Tom. I. p. 454, No. 742 (Adalia).⁵ *Cannus*, 4: 4th cent. *B.M.C.* 7 (two specimens, Makri and Pinara). *Mylasa*, 5: 4th cent. *B.M.C.* 1 (Pinara). *Stratonicea*, 6: 1st cent. *R. Imh.*⁶, p. 315, No. 80 (Makri). 7: 1st cent. *R. Wadd.* 2558 (Makri). 8: 2nd cent. *A.D. B.M.C.* 41 (Makri-Elmalı).

LYDIA.—9*: *Croesus*, 6th cent. *R. B.M.C.* 37 (Akseki).

PHRYGIA.—*Apamea*, 10: 2nd-1st cent. *B.M.C.* 67 (three specimens, Adalia and Phineka-Elmalı). *Ubyra*, 11: 2nd-1st cent. *B.M.C.* 17 (Makri). 12: Domitian, as *B.M.C.* 41, but on obv. in countermark eagle 1 (Makri). 13: Domitian and Domitia, *B.M.C.* 43 (Makri). 14: Diadumenian, *B.M.C.* 57 (Makri). 15: Julia Soaemias, *B.M.C.* 68 (Elmalı). *Dociusium*, 15a*: 2nd cent. *A.D.* (Isbarta). *Hadrianopolis*, 16: Geta, *B.M.C.* 5 (Adalia). *Laelicea*, 17: 2nd cent. *A.D. B.M.C.* 96 (Adalia). 18: Philip II. *B.M.C.* 260 (Castelloryzo). *Pellae*, 19: 2nd cent. *Wadd.* 6373 (Adalia). 20: Caracalla (Phineka). *Sebaste*, 21: Augustus, *B.M.C.* 21 (Adalia). *Sibidunda*, 22: Maximus *Imh.*⁷ p. 289, No. 1. (Adalia-Istapoz). 22a: Gordian III. *Wadd.* 6488 (Elmalı). *Synada*, 23: 2nd-3rd cent. *A.D. B.M.C.* 27 (Side). See Pl. I. 24: Gallienus, as *B.M.C.* 66, but rev. without cippus and position of animals varied (Adalia).

LYCIA.—*Uncertain*, 25: 6th cent. *R. Traité*, 2^{ème} Partie, Tom. I. p. 635, No. 1003⁸ (Castelloryzo). See Pl. I. 26: 6th cent. *R. ibid.* p. 634, No. 1001⁷ (Makri). See Pl. I. 27: 5th cent. *R.* (Makri). 28: *Telthineibi*. *R.* as *Traité*, 2^{ème} Partie, Tom. II. p. 259, No. 331, but rev. triskeles to l. See Pl. I. 29: *Mithrapata*. *R.* (Phineka). 30: *Mithrapata*. *R.* as *ibid.* p. 315, No. 453, but rev. $\text{M}\epsilon\chi\text{P}$ (Elmalı). 31: *Pericles*. *R. ibid.* p. 330, No. 493 (Adalia). 32: *Pericles*, *B.M.C.* 158 (two specimens, Gagae and Kestep).⁹ *In genere*, 33: 2nd cent. *R.* (Arsada). 34: 2nd cent. (Kestep). 35: 2nd cent. (Xanthus). 36: Claudius. *R. Imh.*⁶, p. 21, 2 (Kalamaki). See Pl. I. 37: *Imh.*⁶, p. 23, 10 (Adalia). 38: Claudius, *Imh.*⁶, p. 23, 7 (Castelloryzo).

⁴ Unless otherwise stated all coins are *R.* and all dates *B.C.*

⁵ Though these coins (with top-part of a lion) are generally assigned to Caria, they turn up not infrequently in Adalia, and I was told that they generally come from the neighbourhood of Side.

⁶ Cf. *B.M.C. Ionia, Phocaea* 29.

⁷ Though bought at Makri this coin, like

others of its class, was said to have been found in Nhyron.

⁸ These little bronze coins are commonly found all over Lycia proper (Gagae and Kestep are at opposite ends of the country), thus confirming the view that *Pericles* became ruler of all Lycia. Small bronze coins are not found in large numbers outside the territory within which they circulate.

Antiphellus. 39: Gordian III. *B.M.C.* (Castelloryzo). *Ap.* . . . 40: (Phellus).⁸ *Arycanda*. 41: 2nd-1st cent. *B.M.C.* 1 (Phineka-Elmaly). *Bulbura*. 42: 2nd cent. *B.M.C.* 1 (two specimens, Makri-Elmaly and Makri). 43: *Caligula*, *B.M.C.* 3 (two specimens, Kestep and Makri). *Cragus*. 44: 1st cent. *R* (Kalamaki). 45: 1st cent. *R* as *B.M.C.* 15, but rev. above AY below KP (Tlos). 46: 1st cent. A.D. (Makri-Elmaly). *Cragus-Tlos*. 47: 1st cent. A.C. *R* Wadd. 3044 (Makri). *Cragus-Xanthos*. 48: 1st cent. A.D. *B.M.C.* 5 (Antiphellus); see Pl. I. 1st cent. A.D. *B.M.C.* 28 (Castelloryzo). *Cyanete*. 49: 2nd cent. *R* as *B.M.C.* 1, but without symbol on rev. (Makri). 50: 2nd-1st cent. (two specimens, Cyaneas and Castelloryzo). *Lamyra*. 51: 2nd-1st cent. *R* *B.M.C.* 4 (Castelloryzo). *Masicyles*. 52: 2nd cent. *R* [plated] *B.M.C.* 3 (Adalia-Istanoz). 53: 2nd-1st cent. *R* *B.M.C.* 24 (two specimens, Myra and Kalamaki). 54: 2nd-1st cent. *B.M.C.* 26 (Castelloryzo). 55: 2nd-1st cent. as *B.M.C.* 26,¹⁰ but head on obv. laureate (Makri-Elmaly). See Pl. I. 56: 2nd-1st cent. as *Hunter* II Myra 2 (but rev. symbol star r.)¹¹ (Antiphellus). See Pl. I. 57: 2nd-1st cent. (Phineka-Elmaly); 1st cent. *B.M.C.* 28 (Makri-Elmaly). *Myra*. 58: Gordian III. *B.M.C.* 15 (Myra). *Olympus*. 59: 2nd-1st cent. *R* as *B.M.C.* 1, but rev. sword and shield l. torch r. (Makri). *Paura*. 60: 2nd-1st cent. *B.M.C.* 2 (Makri). 61: 1st cent. *B.M.C.* 6 (Kalamaki). *Pinara*. 62: 2nd cent. *B.M.C.* 1 (Makri). *Telmessus*. 63: 2nd cent. *B.M.C.* 1 (Makri-Elmaly). 64: 2nd-1st cent. *B.M.C.* 2 (three specimens, Makri and Pinara (2)). *Tlos*. 65: 1st cent. Wadd. 3190 (Xanthos). *Tr.* . . . 66: 2nd-1st cent. *B.M.C.* 1 (Phineka-Elmaly). *Xanthos*. 67: 2nd cent. *B.M.C.* 1 (two specimens, Xanthos and Makri-Elmaly).

PAMPHYLIA.—*Aspendus*. 68: 4th cent. *R* as *B.M.C.* 33, but rev. without letter (Adalia). 69: 4th cent. *R* as *B.M.C.* 35, but rev. in countermark helmet. 70: 4th-3rd cent. as *B.M.C.* 71, but obv. eagle r. in countermark (Perge). 71: similar, but letters ΜΦ (Adalia). 72: similar, but obv. in countermark eagle r. (Aspendus). 73: similar, but rev. letters ΘΘ (Adalia). 74: similar, but obv. letters obliterated, rev. in countermark eagle r. (Adalia). 75: 4th-3rd cent. *B.M.C.* *Selge* 53¹² (Aspendus). 76: 4th-3rd cent. *B.M.C.* *Selge* 55¹² (Adalia). 77: 4th-3rd cent. *B.M.C.* *Selge* 58¹² (Side). 78: 4th-3rd cent. 1-13 Imh.⁴, p. 123, 2¹² (Adalia). 79: 3rd-2nd cent. as *B.M.C.* 74, but rev. AC | ΠΕΝ (Adalia). 80: 3rd-2nd cent. Imh.⁵, p. 319, No. 35 (Aspendus). 80a: Hadrian.

⁸ As marked in Klepser's 1890 Map.

⁹ The figure of Apollo on the rev. is radiate, a feature which does not appear on the B.M. specimens.

¹⁰ On the *Hunter* coin the only letter to be read is Μ on the rev., but on the present specimen the Υ of AY can be read on the obv. and MA on the reverse, which destroys the

attribution to Myra.

¹¹ These coins are assigned to *Selge* in the *British Museum Catalogue*, but, as *Dalböck* (Imh.⁵, pp. 318-319) has noted, the monograms ΠΘ, ΘΘ, bring them in line with the contemporary silver and bronze coins of *Aspendus*.

¹² Catalogued in the *British Museum* under *Selassius Thersulius*.

B.M.C. 79 (Aspendus). **81**: Severus Alexander (Adalia). **82**: Gordian III. *B.M.C.* 93 (Adalia). **83**: Philip II. (Adalia). **84**: Valerian I. (Adalia). **85***: Gallienus (Aspendus). *Attaleia*. **86**: 2nd-1st cent. *B.M.C.* 1 (Adalia). **87**: 2nd-1st cent. *B.M.C.* 2 (Perge). **88**: 2nd-1st cent. as *B.M.C.* 2, but rev. in field A in place of B (Adalia-Istanos). **89**: Claudius. *B.M.C.* 13 (Adalia). **90**: Antoninus Pius. *B.M.C.* 18 (Adalia). **91**: Commodus Caesar as *B.M.C.* 21, but obv. ΚΟΜ[ΜΟΔ]ΟC ΚΑΙC (Adalia-Istanos). **92***: Valerian II. as *B.M.C.* 27, but rev. ΘΑΥΜΙΑ can be read on the prize urn (Side). See Pl. I. *Magydus*. **93**: Antoninus Pius (Magydus). *Perge*. **94**: 2nd cent. as *B.M.C.* 10, but obv. in countermark sphinx r. (Adalia). **95**: 2nd cent. *B.M.C.* 12 (Adalia-Istanos). **96**: 2nd cent. as *B.M.C.* 12, but rev. in countermark stag r. (Elmalı). **97**: 2nd-1st cent. *B.M.C.* 15 (two specimens, Adalia). **98**: Trajan (Adalia). **99**: Antoninus Pius (Side). **100**: Marcus Aurelius (Side). **101**: Marcus Aurelius (Adalia). **102**: Julia Domna. *B.M.C.* 35 (Adalia). **103**: Commodus? (Perge). **104**: Commodus? (Side). **105**: Geta (Adalia). **106**: Elagabalus, as *B.M.C.* 41, but obv. countermarks (1) eagle with spread wings, r.; (2) 3 (Elmalı). **107**: Elagabalus (Adalia). **108**: Elagabalus¹¹ (Elmalı). **109**: Elagabalus¹² (Adalia-Istanos). **110**: Philip I. *B.M.C.* 54 (Adalia). **111**: Gallienus. *B.M.C.* 75 (Adalia). *Side*. **112**: 3rd cent. *B.M.C.* 59 (Adalia). **113**: 3rd cent. as *B.M.C.* 59, but rev. in field I. A (Perge). **114**: 3rd cent. as *B.M.C.* 59, but smaller denomination 5 in.¹³ (Adalia). **115**: 2nd-1st cent. *B.M.C.* 69 (Side). **116**: Domitian. *Imh.*, p. 336, No. 13 (Side). **117**: Caracalla (Side). **118**: Severus Alexander (Side). **119**: Severus Alexander (Adalia). **120**: Severus Alexander (Adalia). **121**: Philip II. *Wadd.* 3478 (Adalia). **122***: Gallienus (Aspendus). **123**: Gallienus, as *B.M.C.* 108, but rev. inscription CΙΔΗΤΩΝ (Side). **124**: Salonina, obv. as *B.M.C.* 126, rev. as *B.M.C.* 128, but in field I. A (Adalia). **125**: Valerian II. as *B.M.C.* 128, but rev. inscription CΙΔΗΤΩΝ (Side). *Silyum*. **126**: 1st cent. A.D. *Imh.*, p. 350, No. 3 (Perge). **127**: Sept. Severus (Adalia). **128**: Gordian III. *Wadd.* 3536 (Adalia). **129**: Philip II. (Side). **130**: Gallienus. *Wadd.* 3541 (Side). See Pl. I.

PISIDIA—*Adada*. **131***: Gordian III. (Aspendus). *Antioch*. **132**: Antoninus Pius. *Imh.*, p. 359, No. 11 (Adalia-Istanos). *Apollonia*. **133**: Caracalla? *Imh.*, p. 184, No. 5 (Smyrna). **134***: Ariassus. Antoninus Pius. *B.M.C.* 2 (Aksaki). *Corinthae*. **135**: as *B.M.C.* 1, but rev. ϰ for κ (Castelloryzō). *Oremna*. **136**: Tranquillina. *Imh.*, p. 383, No. 9 (Aspendus). *Etenna*. **137**: 1st cent. *B.M.C.* 1 (Adalia). **138**: Philip II. (Adalia). *Isinda*. **139**: 1st cent. *B.M.C.* 1 (Istanos). **140**: 1st cent. as *B.M.C.* 5, but rev. in field I. A (Adalia). **141**: 1st cent. as *B.M.C.* 5, but obv. head diademed, rev. snake in countermark

¹¹ Possibly Caracalla.

¹² The half of the prowling plover?

(Adalia-Istanos). 142: 1st cent. as *B.M.C.* 8, but rev. in Γ I. KA (Adalia). 143: Trajan Decius. Wadd. 3751 (Antiphellus).³⁶ *Poluelissus*. 144*: Salonina (Isbarta). *Sagallanus*. 145*: Nerva, *B.M.C.* 10 (Isbarta). 146: Commodus? (Adalia). 147*: Valerian II. Wadd. 3882 (Aspendus). 148*: Claudius II. as *B.M.C.* 45, but rev. in front of throne humped bull I. (Isbarta). See Pl. I. *Solys*. 149*: 4th cent. *B.* Wadd. 3934 (Isbarta). See Pl. I. 149a*: 2nd-1st cent. *B.* *B.M.C.* 37 (Aspendus). 150: 2nd-1st cent. *B.M.C.* 38 (two specimens, Side). 151: 2nd-1st cent. *B.M.C.* 47 (Aspendus). 152: 2nd-1st cent. as *B.M.C.* 47, but rev. in field I. Δ I. inscr. $[\text{C}\epsilon\Lambda]\text{C}\epsilon$ (Side). 153: 1st cent. A.D. as *B.M.C.* 67, but rev. above $\text{C}\epsilon$, below star (Adalia). 154: L. Venus, *B.M.C.* 75 (Side). 155: Maximus, *B.M.C.* 80 (Adalia). *Termessus Major*. 156: 1st cent. as *B.M.C.* 1, but rev. above bull crescent (Adalia). 157: 1st cent. *B.M.C.* 3 (Istanos). 158: 1st cent. as *B.M.C.* 12, rev. in countermark bee (Istanos). 159: 1st cent. *B.M.C.* 23 (Adalia-Istanos). 160: 1st cent. similar type, but date on rev. obliterated by countermarks (α) spearhead (Adalia); (β) thunderbolt (two specimens, Adalia and Adalia-Istanos); (γ) bucranium (Elmalı). 161: 2nd cent. A.D. *B.M.C.* 26 (Elmalı). 162: 2nd-3rd cent. A.D. *B.M.C.* 29 (Makri-Elmalı). 163: 2nd-3rd cent. A.D. *B.M.C.* 32 (Adalia-Istanos). 164: 2nd-3rd cent. A.D. (Adalia-Istanos). 165: 2nd-3rd cent. A.D. (Adalia). 166: 2nd-3rd cent. A.D. Imh.³, p. 410, No. 5 (Emedjik). *Termessus Minor*. 167: 1st cent. *B.M.C.* 1 (two specimens, Makri). 168: 1st cent. as *B.M.C.* 4, with countermark bee (three specimens (α) countermark on obv. (Pinara); (β) on rev. (Makri-Elmalı); (γ) on both sides (Kestep). 169: 1st cent. as *B.M.C.* 9, obv. in countermark bee (Phineka-Elmalı). *Tityssus*. 170*: 2nd cent. A.D. *B.M.C.* 1 (Aspendus). *Verbe*. 171*: Commodus. Wadd. 4035 (Isbarta). See Pl. I. 171a: Caracalla, Imh.³, p. 199, No. 1 (Adalia).

CILICIA.—*Aegae*. 172*: 2nd cent. as *B.M.C.* 7, but rev. KA I AY | TONOMOY, in field r. AAΘ. Antioch (*Taruns*). 173*: 3rd cent. as Imh.³, p. 366, No. 54, but obv. monogram Θ ³, rev. Θ and H. (Aspendus). 174: *Cestrus*, Sabina (Adalia). *Sydra*. 175: Faustina jun. Imh.³, p. 491, No. 8. 176: Treb. Gallus (Side).

GALATIA.—177: *Amynias* as *B.M.C.* 15, obv. countermarks printing hook and 9 (Antiphellus).

CAPPADOCIA.—*Caesarea*. 178: Hadrian. *B.* *B.M.C.* 146 (Castelloryzo). 179: Severus Alexander, *B.M.C.* 308 (Adalia). *Tyana*. 180: Marcus Aurelius, *B.M.C.* 7 (Adalia).

³⁶ This reverse type, a sandalled foot, seems otherwise quite unknown at the Pisidian Islands, and the provenance of this specimen suggests that it may really belong to the Lycian Islands

which lay a few miles from Antiphellus, though as a rule the imperial coinage of Lycia is confined to the reign of Gordian III. No other coins are known of this city.

SYRIA.—*Antioch*. 181: 1st cent. A.D. *B.M.C.* 91 (*Antiphellus*). 182: *Antiochus III.* *B.M.C.* 55 (*Pinara*).

PHOENICIA.—*Sidon*. 183: 1st cent. *B.M.C.* 134 (*Kestep*).

ALEXANDRIA.—184: *Hadrian*, as *B.M.C.* 426, but head l. (*Adalia*).

UNCERTAIN.—185: Roman Colonial 1st cent. (*Elmalı*).

The following coins I have thought worthy of fuller description, as they have not yet found their way into any of the standard works cited above. The measurements are in inches.

1. *Hadrianopolis (Thraciæ)*. *Obv.* ΜΑΥΡΚΑΙΑΝΤΚΟΜΜΟΔ. Bare bust, r. laur. *Rev.* ΑΔΡΙΑΝΟΠΟΛΕΙΤΩΝ. Tyche l. *Æ* 75.

The absence of ΚΕΒ or of a magistrate's name (though neither of these is decisive) and the fabric would place this coin among those attributed to Hadrianopolis Thraciæ. But the provenance suggests that it, with others of the same class (e.g. *B.M.C.* 4 with the characteristic Asiatic type of Apollo shooting), may really belong to the other Hadrianopolis in Phrygia.

- 15 bis. *Docimeium*. *Obv.* ΔΟΚΙΜΟC. Head of youthful hero r. *Rev.* ΔΟΚΙΜΕΩΝ ΜΑΚΕΔΟΝΩΝ, in exergue ΤΕΡΕΙC. Cybele turmented standing to front holding in r. phiale, in l. tympanum, behind her on either side rise two peaks (Mt. Persis). *Æ* 1·3. See Pl. I.

20. *Pellæ*. *Obv.* as *B.M.C.* 26 (*Caracalla*). *Rev.* as *B.M.C.* 24 (*Severus*); but without ΤΟΒ after ΑΡΧΙΟΥΝΙΟΥ. *Æ* 8.

Coins of Junius' first archonship seem to be unknown.¹⁷

27. *Lycia*. *Obv.* Forepart of boar, r. *Rev.* Tortoise in dotted square; all in incuse square. *R* 35, wt. 10 grs. See Pl. I.

This completes the series, the stater, tetrobol and diobol of the same types being already known (*Traité*, 2^{ème} Partie, Tom. II. pp. 185-6.)

29. *Mithrapata*. *Obv.* Astragalus. *Rev.* ΜΕΧ Triskeles, in f. l. helmet. *R* 5, wt. 10·5 grs.

33. *Lycia in genere*. [*Rhodes*]. *Obv.* Facing head of Helios radiate; across the face in countermark chimæra r. *Rev.* Rose almost obliterated. *R* 55, wt. 30·5 grs.

34. *Obv.* Head of Heracles bearded facing. *Rev.* ΑΥΚΙΩΝ Chimæra r. *Æ* 55. See Pl. I.

For No. 33 cp. *B.M.C.* Rhodes, No. 203,¹⁸ a coin of the class on which the letters ΡΟ are wanting; whether this is so on the present

¹⁷ *B.M.C.* Phrygia, Introd. lxxxviii.

¹⁸ Where the chimæra is described as a lion.

coin cannot be determined. The class to which *B.M.C.* 203 belongs is supposed to have been struck for Rhodian possessions on the mainland and the countermark would give some ground for assigning it more definitely to Lycia beneath Rhodian rule (188-168 B.C.) This is confirmed by the fact that the coin bears the name $\Lambda \Sigma \Omega \Nu$ which is characteristically Lycian. No. 34¹⁰ bears the chimæra as its reverse type; that the obverse type shows a facing head and that the ethnic is $\Lambda \Upsilon \chi \iota \Omega \Nu$ without mention of the later monetary districts would put it at the beginning of the series, a date which the style confirms, and it may be suggested that these copper coins with the countermarked Rhodian silver formed the earliest currency of Lycia after the liberation of the country in B.C. 168.

35. *Obv.* Head of Artemis (?) facing, over r. shoulder bow and quiver. *Rev.* $\Lambda \Upsilon \chi \iota \Omega \Nu$ Apollo standing to front holding bow(?) in l. $\mathcal{A}E$ 4.

This coin belongs to the series 1-4 on p. 38 of *B.M.C.* Lycia, but the reverse type is new. The obverse seems to be the same as that of *B.M.C.* *ib.* No. 1, there described as an Apollo. The facing head type and the unqualified ethnic would put this series in line with Nos. 33, 34 above.

40. *Apollonia.* *Obv.* Head of Apollo r. diademed, hair in formal curls. *Rev.* $\Lambda \Upsilon \chi \iota \Omega \Nu$. Boat of Artemis r. with quiver at shoulder to l. and r. $\Lambda \Pi$ all in incuse square. $\mathcal{A}E$ 55. See Pl. I.

As both Apollonia and Aperlae are equally near to the place where the coin was found no attribution can be based on provenance, but Aperlae is to be preferred as being the more important town.

44. *Cragus.* *Obv.* $\Lambda \Upsilon$. Head of Apollo r. laurel hair in formal curls. *Rev.* $\Lambda \Upsilon \chi \iota \Omega \Nu$ below, ΚΡΑΓΟC to r. up. Lyre, in f. l. ear of barley, all in shallow incuse square. \mathcal{R} (broken) 65, wt. 20 grs. See Pl. I.

46. *Cragus*, as *B.M.C.* Dias-Cragus 1; but on *obv.* ΕΠ instead of $\Delta \iota$.¹¹ $\mathcal{A}E$ 75. See Pl. I.

These two coins are too close to each other not to come from the same mint; if so ΕΠ and $\Delta \iota$ must both be magistrates¹² and *B.M.C.* Dias-Cragus 1 should be assigned to Cragus. There are no other coins of Dias, and the town itself is only known to us from a reference in Stephanus (s.v.), which does not specify even whether it lay in the Cragus district.

¹⁰ Already published by Babelon, *R.N.* 1899, Pl. IX, No. 12, where this *obv.* is described as a head of Helios. Another example which I saw in the possession of M. Diamantaras of Castellorizon shows the bearded head even more clearly than the coin here published. The type seems to be suggested by the silver of Selge, *B.M.C.* 24.

¹¹ For the symbol (mallet or plectrum Π) in the exergue of *rev.*, cp. *B.M.C.* Pl. XLIII 4 (Mauicytes Augustus). These two bronze coins would belong to the same period.

¹² Magistrates, though rare, are not unknown in Lycia, cp. ΠΠΠΟΛΟ in the Mauicytes district, *B.M.C.* 23.

50. *Cyaneus*. *Obv.* Head of Apollo r. *Rev.* above ΑΥΚΙΩΝ below ΚΥ bow and quiver in saltire. Æ 4.
57. *Musicytes*. *Obv.* Head of Apollo r. laur. dotted border. *Rev.* Above ΠΠΟ, below ΜΑ, bow and quiver in saltire, all in incuse square. Æ 65.

For this magistrate *v.* *B.M.C.* 28 (with different types).

81. *Aspendus*. *Obv.* ΑΥΚΜΑΥΡΕΟΥ[ΑΛΕΞ]ΑΝΔΡΟCCEB. Bust r. laur. in paludamentum, etc. *Rev.* [ΑC]ΠΕΝΔΙΩΝ. Tyche of City, seated l. on rock with rivergod at her feet. Æ 95.
83. *Obv.* ΜΑ·ΙΟΥ·CΕΟΥΗΡ ΦΙΛΙΠΠΟΝ·ΚΑΙC. Bareheaded bust r. in paludamentum, etc. *Rev.* ΑCΠΕΝΔΙΩΝ. Pallas (Γ) standing l. in helmet (Γ) and long chiton, holding palm in l. and dropping pebble into urn with r. Æ 1-2.
84. *Obv.* as *B.M.C.* 98 (Valerian I.). *Rev.* ΑCΠΕΝΔΙΩΝ. Hephaestus seated r. on rock, l. supports shield on knee, r. holds hammer. Æ 1-3. The same reverse type occurs at Perge (*B.M.C.* 62).
85. *Obv.* ΑΥΤΚΑΙΠΟΛΙΓΑΛΛΙΗΝΟCCEB. Bust r. laur. in paludamentum, in front H. *Rev.* ΑCΠΕΝΔΙΩΝ. Wreath within which CΕ·ΜΝΗC·ΚΑΙ ΕΝ·ΤΙΜΟΥ·Τ·ΟΔ. Æ 1-1. See Pl. I.

Τ·ΟΔ on the reverse is obviously a date and must refer to the local *θέρμ* *cp.* ΘΕΜΙΔΟCΤΞΘ, ΤΟΘ, ΤΟΕ.²⁸ The stop on either side of the Τ (each quite certain) confirms Head's suggestion²⁹ that Τ is an abbreviation for ΤΟ while the two last letters contain the date. ΘΕΜΙΔΟC then must be understood with Τ·ΟΔ and the year on Domaszewski's reckoning would be 256.³⁰

93. *Magydus*. *Obv.* Head of Antoninus Pius, r. without inscription. *Rev.* ΜΑΓΥΔ. Hermes standing to front holding purse in r. and in l. wrapped in chlamys caduceus. Æ 85.
98. *Perge*. ΤΡΑΙΑΝΟC ΚΑΙCΑΡ. Bust r. laur. *Rev.* ΑΡΤ ΠΕΡ simulacrum of Artemis in distyle Ionic temple. Æ 6.
99. *Obv.* as *B.M.C.* 28 (Antoninus Pius). *Rev.* as last, but inscription ΠΕΡΓΑ[ΙΩΝ]. Æ 6.
100. *Obv.* as *B.M.C.* 29 (Marcus Aurelius). *Rev.* as last. Æ 55.
101. *Obv.* as *B.M.C.* 29. *Rev.* as last, but on either side sphinx on pedestal, in pediment eagle. Æ 1-4.

²⁸ *B.M.C.* Introd. lxix.

²⁹ *Ibid.* and Domaszewski, *Forum der Pamphyliischen Städte* (Nuss, *Zett.*, 1911, p. 1).

³⁰ The wreath which encircles the inscription has doubtless an agnatic significance.

103. *Obv.* . . . ANTON . . . Bust of Commodus (?) r. laur. in paludamentum, etc. *Rev.* ΠΕΡΓ . . . Turreted veiled bust of City. r. Æ 8.
104. *Obv.* ΑΥΤ ΑΝΤΩΝ. as last. *Rev.* ΠΕΡΓΑΙΩΝ Nike going l. Æ 5.
105. *Obv.* ΑΚΚΕΒ. Bare head bust of Geta r. in paludamentum, etc. *Rev.* ΠΕΡΓΑΙΩΝ. Apollo standing l. over l. which rests on tripod, cloak in r. outstretched branch. Æ 7.
107. *Obv.* as *B.M.C.* 41 (Elagabalus), with two uncertain countermarks. *Rev.* ΠΕΡΓΑΙΩΝ. Draped female figure wearing modius, seated l. on throne: facing her stands r. a similar figure, behind whom stands humped bull r. Æ 1.
108. *Obv.* as last, countermarks (α) eagle with spread wings r.; (β) ΑΡ (?) *Rev.* ΠΕΡΓΑΙΩΝ Tyche l. Æ 1.
109. *Obv.* . . . ANTON. Bust of Elagabalus (?)²⁶ radiate r. *Rev.* ΠΕΡΓΑΙΩΝ. River-god reclining l. on urn. Æ 95.
117. *Side. Obv.* [ΑΥ]ΚΜΑΥCΘΑΝΤΩΝΕΙΝ. Bust of Caracalla r. laur. in paludamentum, etc. *Rev.* [ΝΑΥΑΡ]ΧΙC (?) round. Galley with vexillum at stern, in full sail right, on the sails ΣΙΔΗ ΤΩΝ. Æ 9. See Pl. I.
- If the reading ΝΑΥΑΡΧΙC be correct, and it is supported by the type (cf. *B.M.C.* 113), it would show the existence of a naval station at Side as early as Caracalla, a fact only proved previously for the reign of Gallienus.²⁷
118. *Obv.* ΜΑCΘΥΗΑΛΕΞΑΝΔΡΩ. Bareheaded boyish bust r. in paludamentum, etc. *Rev.* CΙΔΗΤΩΝ. Agonistic crown from which rise two palms. Æ 75.
119. *Obv.* ΜΑΥΑΛ[Ε]ΞΑΝΔΡ . . . as last, in countermark B. *Rev.* CΙΔΗΤΩΝ. Athena helmeted, standing l. holds in l. palm branch and drops with r. pebble into urn. Æ 105.
120. *Obv.* ΑΕΞΑΝΔ. Bust of Alexander with slight beard, laur. r. in paludamentum, etc. *Rev.* CΙΔΗΤΩΝ. The Graces, linked, the two outer holding in l. and r. respectively urn and one handled jug. Æ 105. See Pl. I.

Cp. *Imh. Nymphen und Chariten*, p. 203, No. 15 (Makrinus), where the objects held are a crown and flower.

²⁶ Possibly Caracalla.

²⁷ Victor Tournier in *Revue Belge de Numismatique*, 1913, pp. 415 seqq.

122. *Obv.* as *B.M.C.* 10. *Rev.* Tyche of City seated l. on rock, beneath pomegranate. *Æ* 125.
127. *Silygum.* *Obv.* ΑΣΕΚΕΘΟΥΗ ΡΟCΠΕΡ. Bust r. laur. in paludamentum, etc. *Rev.* CΙΛΛΥΕΩΝ. Goddess? standing r. in veil and long chiton, holding with both hands shrine with pediment. *Æ* 8.
129. *Obv.* ΑΥ Κ Μ ΙΟΥ ΣΕΟΥ ΦΙΛΙΠΠΟΝ ΣΕ. Bust of Philip II. r. laur. *Rev.* CΙΛΛΥΕΩΝ. Men standing r. with sceptre and pine cone, his r. foot on bull's head. *Æ* 85.
131. *Adada.* *Obv.* ΑΥΚΑΙΜΑΥΑΝΤΓΟΡΔΙΑΝ. Bust r. laur. in paludamentum, etc. *Rev.* ΑΔΑΔΕ[ΩΝ]. Tyche l. *Æ* 9.
138. *Eleusa.* *Obv.* - ΣΕΥΗΦΙΛΙΠΠΟΝΚΑΙCΑΡ. Bareheaded bust r. in paludamentum, etc. in countermark B. *Rev.* ΕΤΕΝΝΕΩΝ. Dionysius(?) standing to front, with l. hand raised to his head and r. hanging, at his feet panther(?) l. *Æ* 9.
144. *Pañnelissua.* *Obv.* ΚΟΡ CΑΛΩΝΙΝΑΝ. Bust r. with stephane and crescent between shoulders. *Rev.* ΠΕΔΝΗΑΙCΣΕΩΝ. Zeus holding eagle and sceptre, seated l. on throne. *Æ* 85.
146. *Sagalassus.* *Obv.* ΚΟΑΝΤΩΝΕΙ. Bust of Commodus r. laur. in paludamentum, etc. *Rev.* - ΑCΣΕΩΝ. Warrior standing to front l. rests on spear, in r. patens. *Æ* 5.
164. *Teressus Major.* *Obv.* Bust of Artemis r. wearing crescent between shoulders. *Rev.* Nike l. ΤΕΡ. *Æ* 55.
165. *Obv.* [ΤΕ]ΡΜΗCΣΕΩΝ. Bust of Zeus r. laur. *Rev.* [ΤΩΝ ΜΕΙΖ] ΩΝΩΝ. Nike standing l. in l. palm, with r. crowns female figure who stands to front holding cornucopae in l. *Æ* 12. See Pl. I.
174. *Centrus.* *Obv.* CΕΒΑCΘΗ CΑΒΕΙΝΑ. Bust r. with stephane. *Rev.* ΚΕCΤΡΗΝΩΝ. Six-rayed star within horns of crescent. *Æ* 8. See Pl. I.

There is a coin of Lucilla with the same rev. types published by Svoronos from the Mavromichaelis Collection (*Journ. Internat.* vi, p. 252, No. 712). The coin in the British Museum of Antoninus Pius is false, and recognized by M. Hadji Nicolas as the product of an Armenian forger of Adalia.

176. *Syedra.* *Obv.* ΑΥΤΟΚΡΑΚΑΙCΑΡΟΥΤΡΕΒΓΑΛΛΩΝ. Bust r. laur. in paludamentum. *Rev.* CΥΕΔΡΕ, in exergue ΩΝ. Hades carrying off Persephone in quadriga galloping r. *Æ* 13.

¹ For this type cf. *B.M.C.* No. 11, but the animal bears little resemblance to a panther.

185. *Uncertain Roman Colonial*. Obv. M·RVTILVS·PROCOS·COLIVL·
 Portrait head r. Rev. above ··FERIDIVS. Ockist ploughing with
 yoke of humped oxen l. Æ 7. See Pl. I.

This specimen has been already published by Imhoof, *Revue Suisse*, 1913, p. 115, No. 302. From his coin the words HVIREXDD may be made out in the exergue of the reverse and what is probably A in front of the F. Of the missing letters of the obverse, the first seems to have been square (e.g. B, D, E or L), while the third was possibly an N. Rutilus is otherwise unknown. Imhoof suggests Sinope, Apamea, or Parium as the mint, but though the piece certainly belongs to Asia Minor, the provenance of this specimen and the humped bull of the reverse suggest the South-West. The humped bull is never found in Europe, and not universally distributed in Asia Minor,²⁹ occurring rarely in the North,³⁰ but generally in Caria, Lycia, Pisidia and Lycæonia.³¹ Possibly the coin is to be attributed to one of the Pisidian colonies:

E. S. G. ROBINSON.

²⁹ Keller, *Tiere des Klass. Altertums*, p. 89.

³⁰ Cp. the colonial coins of Parhæa, Lystia,

³¹ Once on a coin of Cyneus, and on a relief at Lebes.

and Iconium;

A BRONZE STATUETTE IN THE BRITISH MUSEUM AND THE 'ARISTOTLE' OF THE PALAZZO SPADA.

[PLATES II-VII.]

AMONG the most important bronzes in the British Museum is the statuette of a philosopher, said to have been found in dredging the harbour at Brindisi, which was acquired in 1865¹ (Pl. II). It measures 20 inches (50·8 cm.) in height, and represents a bearded man seated—though the original seat has disappeared—and resting his chin on his right hand; his left arm, muffled in his only garment, the himation that passes over his left shoulder, lies across his lap and supports the right arm; the right foot is drawn back behind the left, and he wears sandals elaborately tied. The thoughtful and interesting head (Pl. III) suggests in type and period the pleasanter portraits of Aeschines and the newly discovered Aristotle; hair and beard are cut close,² the features are small and well shaped, the whole effect in singular harmony with the reflective pose of the figure. The surface has suffered from the action of water, and there is a large hole on the left shoulder, and a crack running down the arm.

The statuette is compared by Michaelis, one of the very few writers to mention it, with the seated 'Demosthenes' of Petworth, a portrait statue of Attic origin to which a head of the orator has been wrongly affixed;³ but though the composition is similar, the statue lacks the distinctive feature of the bronze, the hand wrapped in the himation and laid across the lap. A much closer parallel is to be found in one of the figures, that seated in front of the sundial, on the famous mosaic discovered some years ago at Pompeii, representing an assembly of philosophers or learned men,⁴ which is a variant of that in the Villa Albani from Sarsina in Umbria; in the latter, however, the distinctive left arm is placed in a different position, and it is obviously unsafe to generalise when the only known copies of a composition differ in an important point. Again, in the matter of dress the parallel is not exact,

¹ *H.M. Catalogue of Bronzes*, No. 348; Michaelis, *Ancient Marbles in Great Britain*, p. 608; *Acquis. Brés.* ninth ed. vol. II. p. 365, Fig. 12, a poor cut which is as far the only published illustration of the figure.

² The figure is not beardless, as stated in the *Catalogue*.

³ Wrongly, because the type of the seated orator is without authority: Bernoulli, *Gr. Bild.* II. pp. 78-9; Studniczka, *das Bildnis des Aristoteles*, p. 7.

⁴ *Musée. d. Lucr.*, 1898, Pl. XII; Bernoulli, *Gr. Bild.* II. pp. 36-37; Halbig *Führer*,² II. p. 46, and references.

as the figure on the mosaic wears a tunic, and so can hardly represent a truly Greek conception of the head of a philosophic school; the coincidence of pose is worth noting, but there can be no question of a community of subject between the mosaic and the bronze. It is, however, not a little strange that the relation of the latter to a group of other works which includes three replicas on a small but varying scale and one life-size and world-famous statue, should have escaped notice, but this is partly due, no doubt, to the fact that not one of these replicas has the original head. In the combination of these with the British Museum bronze lies the solution of one of the famous enigmas of ancient art. The replicas are as follows:—

(a) Bronze statuette in the British Museum. (The literature of this work is very scanty: the available references have been already given.)

(b) Statuette in the Galleria dei Candelabri of the Vatican, Pl. V., 'two palms high' (Welcker), often called Sophocles on the strength of the restored head; restored are also the bare feet, the right arm, the supports of the seat, and the plinth, and the figure struck me when I examined it in October, 1912, as having been worked over or at least much polished. (Clarac, Pl. 846, No. 2132, 'Rome, Coll. Chablais'; Pistolesi vi. Pl. 29; *Monumenti Antichissimi* 30; Welcker, *A.D.* i. p. 460; Helbig, *Führer*² No. 370, omitted in Helbig³; Reinach, *Répertoire* i. p. 513.)

(c) Statuette in the Museo Barracco, Pl. VI., 20½ in. (515 m.) in height, unrestored: head and right hand missing, but the original seat with its curved and reeded legs preserved intact: on the seat is a cushion, treated with extreme realism, as are the forms of the lean and wrinkled body and the drapery, which is bolder and looser than in the other replicas; sandals elaborately tied, differing slightly in the details of the knot from those of (a) ('Vieux savant,' *Collection Barracco*, Pl. LXIV., 'formerly in the collection of the antiquary Scalambrini'.)

(d) Statuette formerly in Dresden (Fig. 1), 'anderthalb Ellen hoch' (Welcker), wrongly restored with the head of Euripides; the bare feet and right arm holding a scroll are clearly restorations; as to the seat, it is impossible to judge from the shaded drawing by which alone we know the work. (Le Plat, *Recueil des Marbres Antiques*, Pl. III.; Clarac, Pl. 841, No. 2093 D, after Le Plat; Welcker, *A.D.* i. p. 487; the latter, writing in 1867, notes that the statuette was omitted from contemporary guide-books; it has not since reappeared.)

To sum up, (a) gives us the original head, but the surface of the bronze has suffered, as much in the head as elsewhere, and it cannot be relied on for minute details; (b) and (c) give us the form of the seat, a stool—a cushion worked with remarkable realism is added in the Barracco example—with delicately curved and reeded legs, and (c) is also noteworthy for the extreme care with which the wrinkled skin about the breast and armpits is rendered, showing that the subject was an elderly man,² and that the type is post-Lysippic. This is confirmed by the type of head in (a), which finds

² (b) is a relatively poor copy, and has apparently been worked over; (d) cannot be judged of by the engraving.

its nearest analogies in portraits of the beginning of the Hellenistic age, to which we may safely assign the original.

Before turning to the life-sized variant already referred to, let us consider the head of (a) and see whether it may be assigned on internal evidence to any philosophic school. The type of the seated orator being unknown (*supra*, note 3) it may indeed be asked why the portrait may



FIG. 1.—STATUETTE FORMERLY IN DUBLIN.

not be taken for that of a poet, writer, or man of science. (1) It cannot represent a poet, as a portrait of an earlier poet would not be represented without a fillet (to this rule Euripides is the one unexplained exception), and poets of the beginning of the Hellenistic age followed the fashion and were clean-shaven. (2) A writer would certainly be represented holding a scroll, or with a *seruinium* by his side, and there is no trace of

either in any of the replicas. (3) A man of science would similarly be distinguished by an attribute, as Pythagoras is by his staff and globe, Heraclitus by his club, Anaxagoras again by his globe, and the later portraits of physicians and men of science by scrolls, staves, or other attributes. Thus, though the head might suit a poet, orator, writer, or man of science, the figure as a whole would not, and the same applies to the one other class to which the head taken alone might belong, that of the Seven Sages: they are indeed only known to us among fourth-century types by heads, not statues, but it is inconceivable that the originals should not have been in some way identified by attributes. There remains only the large class of philosophic portraits among which to seek analogues for our statuette and its replicas. The early *Academicians*, to judge from the well-known portrait of Plato and the passage of Ehippus preserved by Athenaeus (xi. 500),

Εὐ μὲν μαχαίρα ξύστ' ἔχουσ' τριχόματα,
εὐ δ' ὑποκαθίεις ἄντρα πύργωνος δάδη,

wore their hair close-cut and their beards long.⁶ The *Cyrenaics*, those dandies of philosophy, have been thus far represented in art only by the glass paste of Aristippus, the antiquity of which is more than suspected;⁷ even the portrait on which the gem is based is of very doubtful authenticity and both must be rejected as evidence. (See the Note at the end of this paper.) It is, however, highly probable that the *Cyrenaics*, worldliest of philosophic bodies, would at all times follow the fashion as closely as philosophers could, and that philosophic fashion set in favour of the close-cut beard and hair at the beginning of the Hellenistic age we have the portraits of Aristotle and Theophrastus to prove. The *Cynics* on the other hand were from the first notorious for dirt and neglect; the basis of their founder Antisthenes, with the wild beard and hair for which Aristippus laughed at him (Suid. s.v. Ἀριστάρκτος) bear out what Lucian makes Pan say of the later *Cynics* (*Risikos* 11) that some people are always trying to imitate his shaggy beard, and one replica, that in the Villa Pamfili, is actually called Pan.⁸ Elsewhere also, notably in the *Cynicus*, Lucian describes the habits of the school in no measured terms,⁹ while similar passages may be found in Athenaeus¹⁰ and in the letters of the pseudo-Aleiphron.¹¹ Of the early *Stoics* we know Zeno (from busts) and Chrysippus (from coins and possibly sculpture also); both have long beards and shortish hair, while the later Stoic Posidonius, the personal friend of Marius,

⁶ The members of the New Academy, to judge from the portrait of Carneades, followed the later philosophic fashion of wearing a close-cut beard.

⁷ It appears to be founded on the cornelian published in Gallucci's *Illustrationes Imagines* and the marble portrait given by Elia Ligorio and after him by Grunovius (77a. II. p. 34), both of which are now lost. Of the latter Grunovius

justly says, (in ex) ante ornata capillus magnis arte quoniam ingenuis sine ad speciem fuerat, et agnoscitur una utique Philosophus, scilicet Zeno, ac Cyrenaicus.

⁸ Mats-Dalén, *Ant. Bildn.* 1758.

⁹ *Cynicus*, 12-14; *Cynicus passionis*, etc., etc.

¹⁰ xii. p. 541, b-f.

¹¹ *Epistolographi* Gr. in. 40, ed. Indol.

Cicero, and Pompey, wears close-cut hair and beard. Of the Roman Stoics, Horace's *intransus* proves that Cato the Censor wore a beard—not only, we may guess, as a philosopher, but as an ancient Roman living in degenerate days; Seneca—if the head at Berlin be Seneca, which is not absolutely certain—did not, the courtier apparently predominating over the philosopher. Fashion and philosophy unite in the portraits of Lucius Junius Rusticus and his pupil Marcus Aurelius, the latest Stoic portraits we possess. Zeno and Chrysippus are therefore the only members of the Stoic school whose portraits can, from their date, be used in our present enquiry; both wear long beards, therefore our statuette does not represent a Stoic, any more than it can represent a Cynic or Academician.

Is the portrait that of a *Peripatetic*? The correspondence, both in character and treatment, between the head of the statuette and the *Stoicizante* Aristotle and his successor Theophrastus is so close that one is tempted to answer in the affirmative; judging only from probabilities we have seen that it may represent a *Cynic*, but in the case of the *Peripatetics* we can judge from actual monuments, and say, This may well be a disciple of Aristotle. It is not a little curious, moreover, that the name of Aristotle should for centuries have been applied to the one life-sized figure which is related to our bronze, the inscribed statue in the Palazzo Spada (Pl. VII.).

This famous work,¹¹ represents a philosopher seated on a stool, the sides of which are roughly blocked out into steps, his right foot drawn back, his left advanced; he leans his head on his right hand, and his left, wrapped in the himation which passes over his left shoulder, lies in his lap. The right arm—absurdly muscular, considering the wrinkled forms of the body—the whole of the left leg and the himation from the middle of the thigh, and the head and neck are restorations; the head, a fine and characteristic portrait of the close of the first century B.C., was only added after 1562, since the work is mentioned as headless by Aldrovandi in the edition of his *Statue Antiche* for that year, as well as in the earlier editions of 1556 and 1557. It will be seen that the pose of the figure closely corresponds with that of the statuette, but there are one or two points of difference. The right leg of the statue is not disengaged from the stool, and the sandalled foot rests on the first step, not, like the left, on the base of the statue;¹² in the statuette the left foot is drawn back and placed just behind the right, and both are completely in the round. The himation, which is altogether simple in treatment, comes some-

¹¹ The vast literature of the statue will be found in Hübner (1843, p. 201); the principal modern references are given here. It is worth noting, by the way, that Chase must have illustrated the reading *ΑΡΙΣΤΟΤΕΛΗΣ*, as he simply terms the statue 'Philosopher' (Pl. 843, 848; which vary as to the locality of the work.) Further, as Dr. Stettinius (*Bibl. des A.* p. 99) points out, the reading *ΑΡΙΣΤΙΝΝΟΣ* was adopted by the anti-

quary Vandone del Pozzo, and later by the metallist Claude Verrio, who executed a medal bearing a spirited copy of the restored head with that inscription, an example of which, in the British Museum, is referred to in the *Note* at the end of this paper.

¹² The whole of the left leg is a restoration, but the shape of the base shows that it is correct.

what nearer the right shoulder than in the statuettes, and the right arm does not, as in them, support the left, the muffled arm lying instead across the lap: the sandals are of peculiar form, high behind and low across the front and ankles. The realism with which the wrinkled neck and breast are treated forms a curious contrast with the want of finish visible not only in the attachment of the right leg to the stool but still more in the way in which the lines of the thigh are not detached from the seat, to which the figure appears to be attached as closely as an archaic Ionian statue. If this treatment is compared with the easy pose of the Barmecio statuette upon its cushion, or with such a work as the relief of the seated Menander in the Lateran, it will hardly be doubted, I think, that the copy, though of Greek workmanship, belongs to the first rather than the second century B.C. and is not a work of the first order, in spite of its undoubted merits.

As to the inscription, the reading ΑΡΙΕΤΟ[ΤΕΑΗ]Ξ, once universally accepted, was dethroned by Dr. Studniczka in the *Römische Mittheilungen* (1890, pp. 12 *seqq.*, cf. the same author's *Bildnis des Aristoteles*, Pl. I. and text), who pointed out that the pre-imperial character of the inscription excluded the possibility of such a restoration, since the beginning of the first lost letter, with its upright *hasta*, would imply the square form of the Δ, which is later than the inscription; there is moreover, grave doubt whether there is room for five letters between the Τ and the final Ξ. Another early suggestion, ΑΡΙΕΤΕ[ΙΔΗ]Ξ, is also impossible, as the only available Aristides would be the statesman, who, as all writers agree, would never be represented in ancient art in a pose and dress suitable to a philosopher or man of science. There remains Dr. Studniczka's reading ΑΡΙΕΤΙ[ΝΠΟ]Ξ, which completely satisfies the epigraphical evidence, and is unhesitatingly accepted by Dr. Holbig, and by Dr. Bernoulli¹² and Dr. Arndt¹³ with the reservation that difficulties do exist. The first of these is that no traces of the beard appear on the breast of the statue, whereas a philosopher should by all analogies have been bearded: that such traces have not disappeared under modern polishing is proved by the fact that the statue was restored with a beardless head. To this the British Museum statuette affords a complete and satisfactory answer: the beard, like those of Aristotle and Theophrastus, was cut close. The second difficulty proposed by Dr. Studniczka and repeated by Dr. Bernoulli, is this, that the realism of the wrinkled flesh points to a later date than that of Aristippus, who died about 360 B.C., and to a person living in meaner surroundings (eine in dürftigerer Sphäre lebende Persönlichkeit). Dr. Holbig, however, calls these chronological difficulties trifling, and points out that to evade them by assuming, as has been proposed, that the statue represents the younger Aristippus, called in antiquity Μαρσιδίατρος, is unsatisfactory, as the latter was a comparatively insignificant person. It is easy on the other hand, to suppose a famous statue of the founder of the Hedonist philosophy erected some time after his death, so that the chronological difficulty counts for no more than in the

¹² *Op. cit.* II. pp. 12-13.

¹³ *Op. u. cit.* *Portr.* 376-80.

case of the Demosthenes of Polykretus, set up in 280, or the Sophocles and Euripides of Lycurgus, set up in 342, to take two famous and obvious examples. As to Dr. Bernoulli's argument from the leanness and wrinkles of the torso, and its consequent inappropriateness to the famous Aristippus, there is no proof that the apostle of pleasure may not have grown lean in his old age, or have been represented as lean by the artist. Moreover, we know that Aristippus when young devoted himself to the doctrines of Socrates with such passion that he grew emaciated, pale and thin,¹⁴ which is at least presumption that he would not grow over-fat in his later years. He certainly lived to be old, since he came to Athens to see Socrates¹⁵ and remained with him as a disciple to his death in 399, though absent from the last scenes in Aegina, as Plato maliciously notes;¹⁶ that he took disciples of his own in his master's lifetime we know because he is said to have charged them a fee for his teaching, which sophistical proceeding deeply offended Socrates.¹⁷ He cannot therefore have been less than thirty at his master's death, and was probably much nearer forty, and at his death in or about 360 he must have been seventy at least.

It is satisfactory to add that, as the life-sized torso of Aristippus in the Palazzo Spola enables us to identify the British Museum statuette, so the latter in its turn furnishes the means of identifying as a portrait of Aristippus a splendid life-sized head of Greek marble in the Uffizi¹⁸ (Pl. IV.) which the present writer, with youthful rashness, formerly identified as Demetrius of Phalerum. (*J.H.S.* 1904, pp. 93-97 and Pl. III. here reprinted.) Some of the arguments used in that paper apply with equal force to Aristippus, and are therefore summarized here. (1) The head is bearded, and dates from the close of the fourth century, therefore, though its character is rather that of the man of the world, it must represent a philosopher. (2) The closest parallels among identified philosophic portraits are offered by the heads of Aristotle and Theophrastus, the head therefore represents a member of a courtly rather than an ascetic sect. (3) The portrait belongs to the school of Lysippus. As to the last point, I find myself in agreement with Dr. Arndt, who sees in it 'skopasisches Pathos aber mehr lysippische Formen' rather than Dr. Amelung, who identifies it as a work of the second Attic school; as we have seen above, the body to which the head belongs is already recognised as not earlier than Lysippus.

I must confess that the likeness between this head and the 'Isocrates' of Achilles Statius (*Illustrium Viror. ut exstant in urbe expressi vultus*,

¹⁴ Plat. *de corp.* 2.

¹⁵ Plat. *loc. cit.*

¹⁶ *Plat.* 59 c.

¹⁷ *D.L.* II. 8, 63.

¹⁸ Dusschke, *Ant. Bildn. v. Griechenl.*, No. 422, Vol. III. p. 259; Amelung, *Philosophen des Alterthums in Florenz*, No. 128; Arndt, *Bruckmann, Gr. u. röm. Portr.* 311-2. Cf. *E.P.* text to Nos. 733-4, in which the nearest

analogy to our portrait is said to exist in the head of the Socrates under which is universally ascribed to the school, if not to the hand, of Lysippus. Restorations: horn, neck, parts of the beard, outer rims of the ears, and tip of the nose. The head struck me, when I examined it ten years ago, as the finest Greek male portrait in Florence.

Romae, 1569, Formis Antonii Lafreri) which is noted by Dutschke (*Ann.*, p. 259) is to my eyes extremely slight; but that the same writer was right in considering the head that of an elderly man I have now no doubt whatever. He also states a fact noted apparently by no other writer, that the Florentine head bore the name of Alcibiades, given to it, one may guess, from its likeness to the gem (Fig. 2) published by Faber and reproduced by Visconti (*Icra. Gr.* I, 16, 3), from whom our cut is taken. I was not aware that the name of Alcibiades had been applied to the Florentine head when in *J.H.S.* 1904, p. 95, I drew attention to the fact that head and gem represent the same person; that it is so a comparison of PL IV. with Fig. 2 will at once make



FIG. 2.—ARISTIPPUS. (Pinn & Goss.)

clear. The gem was apparently in existence in 1873, when M. Roussaye received a cast of it from Italy (*Gazette des Beaux Arts*, 1873, p. 477), but its present whereabouts are unknown; it will be seen that the drapery corresponds with that worn by Aristippus in the statues, as does also that of the restored horn on which the Florentine head is now placed, and as there is nothing in the gem as we know it from the reproductions to arouse suspicion, we may provisionally consider it as a third example of the portrait of Aristippus.

But a more serious question is this: would Aristippus, of whose luxurious and effeminate dress we hear so much from the tradition-mongers, be represented in the simple cloak of the philosopher? Even if we had no proof, we might answer that a disciple of Socrates, who always wore this

garment,¹⁹ and the head of a philosophical school would certainly be so represented in an official statue, even if he 'breathed odours' (Luc. *Dial. Mort.* 205) in ordinary life; that Aristippus did actually wear this dress we know from Plutarch,²⁰ and from the famous story given by Suidas²¹ and Stobaeus,²² which relates how Dionysius persuaded Aristippus to put off his *τρίβων* and to put on a purple robe and dance, whereupon Plato reproached him with a quotation from the *Bacchae*,

αἶε ἀν' ἐνταίμεν θῆλυν ἐνδύσθαι στολὴν,

to which Aristippus replied with another quotation from the same play,

καὶ γὰρ ἐν βακχεύμασιν
οὐδ' ἡ γὰρ πάφρον οὐ διαφθαρίσμεται.

The only works of art to throw light on this matter of philosophic dress are the statues of philosophers in our museums and private collections, most of which wear the *τρίβων*; but of these only two can with any safety be identified, the Chrysippus *digitis computans* of the Louvre,²³ and the bronze Hermarchus of New York;²⁴ both represent the head of a philosophic school in his official dress, though one is standing and the other sitting; the former, whose head is unfortunately missing, hardly falls short of our Aristippus in its realistic rendering of the forms of age.

The statue in the Palazzo Spada corresponds then exactly with what we should expect from the literary evidence as to his dress and appearance and with the available monumental evidence as to the way in which the head of a philosophic school was represented in art, but it is now recognised as only a copy, though a Greek copy, of an earlier original which must have belonged to the early Hellenistic period; the drapery is treated with comparative simplicity, the flesh with much realism, and both are earlier in style than the analogous statuette in the Barnacro collection, although this latter is probably earlier in date than the Spada statue, which though a copy of an earlier original belongs to only the end of the second or beginning of the first century B.C.

What is the relation between the statue and the statuette? In the first we have a figure leaning forward, his chin in his right hand, his elbow resting on the right thigh, while his left hand, wrapped in his himation lies across his lap; the head turned sharply to the left; one of the sandalled feet is drawn back, the other advanced. In the statuette we have a man sitting almost upright, his right elbow resting on his left arm, which lies across his

¹⁹ *Spang.* 219 b; *Protop.* 325 n.

²⁰ *de feet.* et *vid.* *Alex.* i. 8. Dugames *Lac.* has even used the contemptuous word *filos* of his dress in one passage (ii. 3, 47).

²¹ *S.v.* 'Aristippus'.

²² *Sextus in Stob.* *Flor.* v. 48, quoted by A. S. Wilkins in *Hesper.* Ep. I. col. 30. The question is given under different circumstances by Athenaeus (344 a). The text of all three is

different.

²³ For literature see Bernoulli *ib.* p. 152.

²⁴ *Galleria of the Metropolitan Museum of Art*, 1911, p. 190; *Delbrick, Ant. Fests.* Pl. 26. Poets of this period, it may be noted, wear an underdress, as the Pheidippus and Menander of the Vatican and the Menander molition and relief of Marburg and the *Lacuna*.

lap wrapped in the himation; his sandalled feet are crossed in front of him. The differences between them are simply caused by the variation in the position of the left arm; because it does not support the right arm, this has to rest on the thigh, with the result that the figure leans forward, and draws back his right foot to give additional support to the arm; whereas in the statuette the support given to the right arm by the left makes the uprightness of the figure and the crossing of the feet in front a position both natural and comfortable, as an attempt to realise either posture will at once shew. Against these differences must be set the undoubted fact of the general resemblance of the two types, the lean philosopher in his simple dress resting his head in his hand, the sharp turn of the head to the left, and still more the feature peculiar to the statue and statuette alone among the dozens of seated figures that have come down to us, the left hand lying across the lap completely wrapped in the himation. We can infer from literary evidence that the Cyrenaics like the Peripatetics would wear a short beard, and we see in the statue as in the statuette that the beard must have been cut close, or it would have left its mark on the breast. The statue, as is universally agreed, represents Aristippus; can the statuette, which resemble it in general character and in the particular detail of the veiled hand which is known in no other philosophy—and I think in this form in no other male—statue, represent anyone else? The statuette is a replica of a famous philosophic statue, and the type of beard preserved by the British Museum replica is only appropriate to one or two schools. The statue, though clearly derived from an earlier original—witness the comparative simplicity of the drapery—presents the characteristic features of the statuette, the lean and wrinkled body, the head resting in the right hand, the left arm completely hidden in the himation and (by inference) the short beard. May we not conclude that the Aristippus Spada is a life-sized copy of a different and earlier original, and that in the four statuette we have reproductions of a later Hellenistic variant of the original type, altered slightly in composition but carefully preserving the gestures and the essential features of the original?

Is it possible to assign the work to any school? The strong resemblance of the British Museum head to the recently discovered Aristotle is suggestive, and it is hard to assign the Aristotle to any but the school of Lysippus, the official sculptor to the court of Alexander. Nothing is more probable than that Aristippus' grandson, namesake, and successor should have erected a statue in honour of his grandfather and predecessor as Iophon did in honour of Sophocles and Theophrastus of Aristotle, and should commission one of the great realistic sculptors of the day, the old Lysippus himself—sculptor of a famous portrait of Socrates and of ideal portraits of Aesop and the Seven Sages—or one of his sons, or his brother Lysistratus, inventor of casting from the human face, to produce a statue. There is no such dramatic appeal to the emotions as in the statue of Demosthenes with his clasped hands and 'fiery soul which, working out its way, fretted the pigmy body to decay, And o'erinform'd its tenement of clay'; self-contained and reflective the

philosopher sits, the embodiment of Lucian's 'charming and gracious and most clubbable man,'²⁵ 'one of the greatest of philosophers,' the same writer (*de Pueris*, 33) elsewhere calls him, the Wise Man of tradition and Horace:

*emula Aristippum decuit color et status et res,
tampotentem maiora, fore presentibus æquum,
contra, quem duplici potius pallentis robet,
mirabor, vitæ viâ si conuersus decobit.*²⁶

Such praise as this must be remembered, and set against the hostile hints of Plato and Xenophon the mystic and the simple-minded soldier, and the grosser stories of the late compilers.

The original of the Spaula statue was obviously life-sized: what of the statuettes? Can they too be derived from a larger work, or must we assume an original on a small scale? The little heads in bronze and marble of Zeno, Demosthenes, Epicurus, Hermarchus, Pseudo-Seneca, from Herculaneum, are hardly parallels, as they do not aim at reproducing more than the head; other seated figures on a small scale exist, at Ince,²⁷ for instance, the headless Moschion of Naples, and the statuette of Hermarchus at New York already alluded to; but they are rare. Much more interesting and suggestive is the fact recorded by Lucian that the physician Antigonos of Cos was in the habit of carrying about with him a statuette of Hippocrates a cubit high,²⁸ this, as Dr. Bernoulli justly says,²⁹ indicates that the use of herms in private circles did not prevail so exclusively as existing monuments would lead us to suppose. It cannot be doubted that a portrait of Hippocrates was not originally made on so small a scale; it is probable that the countryman and disciple of Hippocrates had this figure made for his own convenience. Why, however, should four replicas of a portrait of Aristippus on a small scale exist, and on a large scale only one? It may well be that, as the Cyrenaics, in later times at least, were not an important educational body, or even, apparently, a highly organised school,³⁰ they would need few portraits of the founder for public use, few, that is, on a large scale; the later Cyrenaics were individuals rather than members of a great organisation, admirers rather than apostles: if they wished for a portrait of their founder it would be for personal reasons, so that a statuette a cubit high would suit them better than a reproduction of the original on its proper scale; and that the original of the statuettes, as well as of the Spaula statue, was life-sized the analogy of the small heads from Herculaneum and the statuettes of Hermarchus and Hippocrates leave little doubt. This theory

²⁵ *What not symposium and conversation, Vita Hm.* 18. This passage and the contention of Vice and Virtue should be put against Lucian's humorous attack on him as a glutton, a master of vice, an insatiable int. in *Vit. Auctis* 12.

²⁶ *Ep. l. viii.* 23; *op. cit.* II. 2. 180.

²⁷ *Class.* 846. No. 2151; *Michaelis, Ant. Mus.* p. 352.

²⁸ *Philop.* 21.

²⁹ *Gr. Rev.* I. p. 161.

³⁰ The list of names given by Diogenes Laertius (II. 8. 7) is a short one. Cf. Goussier's chapters on Aristippus and his school.

is confirmed by the existing portraits of the heads of other schools; the Stoics and Peripatetics were large and flourishing teaching bodies: portraits of Aristotle and Chrysippus would therefore be wanted for the schools; it was Aristotle's successor Theophrastus who ordered a portrait of the master to be set up in the sanctuary (*tepon*) of the school (Diogenes Laertius v. 2. 14) and of the popularity of their portraits in later times we hear from Juvenal (*Sat.* li. 6):—

*quamquam plenus amica gypso
Chrysippi invenias; nam perfectissimus horum est.
Si quis Aristotidem similem vel Pittacon evit.*

Personal feeling rather than formal discipleship characterised the later admirers of Aristippus, if we may take Horace as a type; and an *objet d'art* in the shape of a reduced copy of the entire statue, which has every mark of being a characteristic portrait, rather than a life-sized reproduction, would be more in keeping with their private wants.

The Spada statue then appears to be a careful copy of an early Hellenistic original, the statuettes to be reproductions of a second and slightly later type, in which a variation on the original pose introduced certain modifications of position, but preserved the essential features, the emaciated body, the chin resting in the right hand, the left hand and arm wrapped in the himation, and the turn of the head to the left to be inferred from the position of the neck. The British Museum bronze preserves the head, and furnishes a basis for further identification. For the first time therefore we possess two variants of the same subject in different materials, from different originals, and on different scales, excellent examples both of the portrait destined respectively for public and for private use.²¹

NOTE ON THE BRITISH MUSEUM PASTE BEARING THE NAME OF ARISTIPPUS.

The authenticity of this gem, which bears a head of the philosopher between three busts of the appropriate deities, Dionysus, Apollo, and Athena, and a full-length figure of Aphrodite crowning the post; and the inscription ΑΡΙΣΤΙΠΠΟΣ, was accepted by Furtwängler and Bernoulli; but Dr. Studniczka has pointed out that the type of the philosophic bust wearing a chlamys fastened by a brooch on the shoulder is never found before the Renaissance, and that the gem is (as the present writer had independently noted) a worked-up and often repeated version of the Orsini cornelian of Gallaeus (*Imagines* 32), itself an uninscribed gem attributed to Aristippus.

²¹ The type of the seated philosopher, as Mr. Walters pointed out to me, is found on Roman lamps: *Keramika Funde in Haltern, in Mith.* & *Altertümer Rommischer für Wolfenbü.* v. Pl.

XIX. 2; XXI. 25; other specimens, in Mainz and in the Rachen collection in Basel, are mentioned, *loc. cit.* p. 207.

on the ground that Pirro Ligorio possessed a similar but inscribed head in marble. As both have long disappeared, the portraits cannot be judged at first hand, but the foundation for the name is so slight that it is most unlikely to be correct. As to the paste, apart from the doubtful character of the portrait, the Aphrodite strikes me as suspiciously like an adaptation of the Venus de' Medici; the lyre of Apollo and the cup held by Dionysos to his lips are far from satisfactory in their respective positions, and suggest a Renaissance rather than a Roman origin, which does not make the coincidence of the principal head with the Aristippos type identified on such precarious grounds by Renaissance authors at all less suspicious. The evidence is all against the retention of the paste as a genuine ancient portrait of Aristippos, and Dr. Winter's ingenious conjecture, that we have an Aristippos in a philosophic head at Berlin and its replicas which he compares with the gem and considers on *a priori* grounds quite satisfactory, therefore falls to the ground. (Winter, *Festschrift für Theodor Goussier*, pp. 436 *seqq.*; the head and one of its replicas are also published by Arndt in *Gr. u. röm. Ports* 361-2, 363-4.)

One other late Renaissance portrait of Aristippos exists, as Dr. Stadnicka points out, in a large medal by Claude Varin (*J. Lyons*, 1650-1654) in the British Museum (no reverse type). The inscription reads ARISTIPPVS CIRENENSIS, and the portrait is a reproduction of the Spada head with the addition of a tunic round the edge of the bust, which is in high relief, and the exaggeration of the rugged features and wrinkled neck of the original. Its chief interest is the evidence it affords for the reading Aristippos adopted by Varin, and later by Cassiano del Pozzo, as against the almost universally accepted Aristoteles or Aristides, for the inscription of the statue in the Palazzo Spada. It is worth while to mention, for the sake of completeness, that on his monument to Dr. Joseph Warton in Winchester Cathedral, Flaxman represents that headmaster as teaching a group of Winchester scholars in the shadow of two herms representing Homer and Aristotle. The latter, of course, is a copy of the head of the Spada statue; it also appears in Barry's painting of the Elysian Fields at the Society of Arts, side by side with Plato and close to Socrates. The true head of Aristotle has been recently carved as a finial over one of the doorways of the Bodleian Library at Oxford, its companion head being that of Plato.

The 'Alcibiades' gem (Fig. 2) received its name according to Faber (*Imag. Illustr.* 4) from its likeness to one on which was engraved the same head together with that of Socrates, the latter's name being inscribed in Greek letters. It is impossible to assume on such evidence that the likeness existed or that the gem was genuine, but at least there is no improbability in finding a head of Aristippos side by side with that of Socrates, and it is perhaps in favour of the gem that only the name of Socrates was inscribed, since a Renaissance forger would probably have added that of Alcibiades as well.

KATHARINE A. ESDALE.

NOTES ON *INSCRIPTIONES GRAECAE* V. 1.

THE editor of the recent volume of the *Inscriptiones Graecae*, which comprises the inscriptions of Laconia and Messenia, is to be congratulated upon the conclusion of a long and arduous task, and still more upon the careful and scholarly manner in which that task has been accomplished. Undertaken originally by Max Fraenkel, who devoted to it the few months of life which remained to him after editing the Argolic inscriptions (*I.G. iv.*), it was carried on by Hans von Prott, and after his sudden death in 1903 was entrusted by the Berlin Academy to Walter Kolbe, now Professor at the University of Rostock, who after almost ten years has completed it in a manner worthy of the august body under whose auspices it has been carried through. Out of 1626 inscriptions, 158 had not been previously published, while the texts of those which were already known have gained much by correction, based usually upon the copies of the editor or of von Prott, and by judicious restoration. The present writer has to acknowledge a number of errors and omissions in the epigraphical section of the *Sparta Museum Catalogue* which are set right in this volume.

While it must be of great interest to all students of Greek epigraphy and antiquities, the work will receive a specially warm welcome in this country, in view of the large part taken by the British School at Athens since 1905 in the discovery of new Laconian inscriptions and in securing more exact and trustworthy copies of those already published.

There is a sense in which this volume is final and definitive. Yet inasmuch as the editor has gathered together between its covers most of the materials necessary for the appreciation and criticism of his labours, it is natural that others should try to check some of his results and, it may be, to carry the work yet a little farther toward perfection. I add notes of a few of the points which have struck me on a first glance through its pages: the fact that the questions dealt with are apparently so trifling must be regarded as my tribute to the success of Professor Kolbe's undertaking.

No. 27. The stone in question is in the Sparta Museum, where it bears the number 446. The text is so mutilated that I did not think it worth while to publish in the *Catalogue* all I could decipher, but gave only a few words and phrases for purposes of identification. To win as much as he has done is a triumph of von Prott, but unhappily the corrosion of the stone's surface has gone so far that it is impossible to restore a continuous text.

69, 71. In 69 ll. 30-35 and in 71 b ll. 23-39 we have a list of the Spartan *πομοφύλακες* who held office in the year of Cassius Aristoteles, shortly after 150 A.D. The fourth name in each case (69 l. 34, 71 b l. 37) is written ΠΕΡΙΚΛΗΣ upon the stone, and is transcribed by Kolbe following Boeckh and the *Spartan Museum Catalogue*. Πό(π)λιος Μ(έμμος) Περιελῆς. This reading I now regard as untenable. The present case must be treated entirely on its own merits, since this Pericles is not elsewhere mentioned.

In none of the 34 other instances in the present volume in which the collocation Πόπλιος Μέμμος occurs do we find this monogram of ΠΟΜ used. Πόπλιος is, it is true, sometimes abbreviated to Π (7 times) and far more frequently to Π with a small ο placed inside (15 times) or above it (once, in 197); but Μέμμος, though abbreviated eight times to ΜΞ, standing separately or in ligature, is never shortened to Μ, and it is extremely unlikely that, even were it so far abbreviated, it would be combined with Π in a single monogram.¹ On the other hand, Pompeius is written nine times in full, four times as Πομπῶ, once as Πομ (346), twice as Π (33, 71 a), while Pompeius, which is most frequently written in full, is abbreviated once to Πομπή (357) and seven times to Πομ.² In four of these last seven cases ΠΟΜ are written separately, once (170) the Ο is engraved within the Π to which a small Μ is added by ligature, while twice (464 ll. 2, 12) we have exactly the monogram of ΠΟΜ with which we started.

It seems to me therefore that in 69 and 71 we must read either Πομ(πῆος) Περιελῆς or Πομπώνιος Περιελῆς, preferably the former. The absence of a praenomen need cause us no uneasiness, since the omission is very common and is found on both lists in the case of the following name Πά(ρ)κιος Χαιρόγονος. I call attention to this correction because this example is frequently adduced to illustrate the lengths to which the Greeks carried their practice of abbreviation (Franz, *Elementa* 353).

177. Amongst the *catalogi collegiorum incerti* figures a fragment of a list of names, of which the last two are, according to Kolbe's transcription,

[Μά]ρταις · Φιλίππος (Φιλίππου)

[Θ]έλαρος (Ἰξαρτιάς).

The note is added: 'Ἰξαρτιάς scripsi patet litteram Ε a lapideis omissam vel Ξ et Ε in ligatura Ξ coniunctas esse.'

A μέμμος is found in each of the lists of *Ταινάρων* (210-212), in the only complete list of *οι στραθῆτες* (209 l. 13, omitted in the Index) and in that of the *τεροφίταις* (141 l. 5), and I believe that similar functionaries are here referred to, though Kolbe has placed them (p. 348 f.) in a different class. Further, I cannot accept Ἰξαρτιάς: the absence of a patronymic is, though not conclusive,

¹ Μ. Αλε. is written in monogram on an Attic gurney stone (J.G. III. 1255), but that belongs to a considerably later date, and the collection *Musaei Atrianae* is far commoner than *Palaem*

Mommius.

² I have omitted the monogram of Πομ in 1459, for which see my note below.

against this interpretation, while the only title of this kind known at Sparta—*ἐξηγητὴς τῶν Λακουργίων ἐδών* (554 l. 14)—suggests a man who, if he occurred at all in such a list as this, would at least take precedence of his colleague. In 212 l. 46 a certain Κλέων *ἐξ* Ἀγέτας appears as secretary of the *Ταινάρια*: there Conze and Michaelis wrote *ἐξαγητὰς*, but Foucart's transcription (based on the analogy of numerous examples of a similar use of *ἐξ*, *ἐκ* and *ἐν* in 200 and 212) is certainly preferable, and the phrase is to be interpreted 'Cleon freedman of Ageta'. We should, I think, read *(ἐ)ξ* Ἀγέτας in 177, though the Ageta here referred to can hardly be the same as that of 212; if the former belongs to the first century after, the latter to the first century before our era.

I agree with Kolbe in the first part of his statement (p. 70), 'certum duco *ἐξ* significare libertum et per compendium scriptum esse pro *ἐξελεύθερος*'; but the second seems to me less likely in view of the fact that *ἐξ* is used before vowels (also *ἐξ* Περφίλας, 209 l. 22), while *ἐκ* or *ἐν* occurs before consonants (209 ll. 24, 26, 29). I take it therefore to be the preposition rather than an abbreviation of *ἐξελεύθερος*.

229. 'Diffido lectioni' is von Wilamowitz's note. But Fraenkel's reading is fully borne out by a copy made by myself when visiting Kalyvia Sochiotika with Professor R. C. Bosanquet in December, 1903, when the inscription was uncovered and thoroughly cleaned. The letters are carefully engraved and are all perfectly clear. A curious fact is that the final Δ on the stone is so far from the right hand margin as to make it unlikely that anything followed; if this is so, we have here another example of the use of Δ for ἀνέθηκε(-ας) of which 981 affords an instance.

To the various spellings of *συναρμόστρια* I called attention in *J.H.S.* xxv. 50 f., and in *J.H.S.* xxxii. 100 I gave a list of the occurrences of the word. Owing to changes made in the numeration of *I.G.* v. i. after the first proofs were in print, No. X should be read 1390 instead of 1388. No. XI 1447 instead of 1439. No. IX occurs in the present volume among the Addenda as 1511.

The riddle of the first line I cannot solve, but have a suspicion that in this hyperarchaistic text the mother and father of the dedicatrix may be mentioned, in which case we must read *Ὁβριμὸς* instead of *Ὁβριμῶς*. If we accept the latter reading and make it refer to a human being, we are confronted by the difficulty of the singular number in *συναρμόστρια*. Or can there be a reference to *Ὁβριμῶς*, the by-name of Persephone given us by Lycophron 698?

596. In the *Addenda* (p. 304) Kolbe accepts the reading *παρ(αδόξου) ἀφ(έσταιν)*, which I suggested in *J.H.S.* xxxii. 103 on the analogy of what are now *I.G.* v. i. 305, 554 and 555 b; further examples of the same collocation are found in 553, 555 a, 628 and [641].

683. The editor seems to have overlooked my correction *προστᾶτ[ου πόλεως]* (*B.S.A.* x. 69), and continues to read *προστᾶτ[ου τῆς πόλεως]* in l. 7.

There is, however, no room for the article, and in 547 the same man is entitled *προστάτης πόλεως*. Cf. 32 A 4 *ἐπιμελητὴς πόλεως*.

1142. An archaic *epitaphos* from the village of Maria, written retrograde, has in its first line the dedicator's name:

ΣΟΤΝΑΜΤ·Ι

which Kolbe transcribes 'Ε...μαστος, adding the note: 'Ε[ρ]έματος vide 'Ε[χ]έματος legi posse concedit editor. 'Εχέματος in titulis Delii, vult I.G. xi. 199 A 32. To me a much more probable conjecture seems 'Ε[ν]έματος. Everyone who deals with Greek inscriptions knows by experience how liable Υ and Τ are to be confused, and though the name does not occur elsewhere its existence in Laconia need cause no surprise. For we already know from Spartan inscriptions of an 'Ενυμακρατίδας, the son of Damonon (213 *missim*) and of a patronomus 'Ενυμαστίδας (97, 280), and the latter points to the existence of a name *'Ενυμαστίας, as 'Αρχιδας to 'Αρχίας, Καλλιιδας to Καλλίας, etc. 'Ενυμα must be taken as a Laconian form of *δυναμ*,³ which commonly occurs as *δυνα* in Dorian dialects, giving rise to such names as 'Ονυμακλῆς at Troezen and Megara, 'Ονυμαρχος and 'Ονυμακλῆς at Cyrene, 'Ονυμάνδρος at Cos, Calymna and Halicarnassus, 'Ονύμος at Corinth and Rhodes, 'Ονυμάς at Megara.⁴ Bechtel-Fick, *Die griech. Personennamen*, 225, gives 'Ονομάστιος as a Greek name.

A further possibility would be to read 'Ε[τ]έματος, and to connect it with the Spartan names 'Ενυμοκλῆς (604; Xen. *Hell.* v. 4. 22, 32, vi. 5. 33; Plut. *Agessil.* 25), 'Ενυμοκλῆδεια (488, 534, 591) and with 'Ενύμος, 'Ερέμα, 'Επύμων, 'Ενυμώνδας known from other states.⁵ But this restoration appears to me less probable than the other.

1213. Kolbe rightly interprets the inscription Μ on a large ball of black marble as equivalent to *μ(οῦ) η'*. His note is 'sphaera, cuius radius 0.075 m ponderis habet circa 4000 g vel, si minam 655 g habere duxeris, septem minas.' But η can hardly bear the value 7; it must denote 8, and the weight of the mina, if the total of the ball is rightly estimated, will be 575 grammes.

1280. If Ζ really stands on the stone after the name of Cratesiclea in l. 10, it might be explained, like ΛΒ in 772 and ΚΕ in 1299, as giving the age of the deceased, seven years.

1483. Θ is here transcribed Γ(αἰου)Πομπ(ωνίου). That the monogram is intended to contain five letters I strongly doubt, still more that it is intended to represent two names. Here too we have to deal, I believe, with a shortened form for Πομπ(ηίου) or Πομπ(ωνίου). See my note on 69 (above).

MARCUS N. TOD.

³ O. Hoffmann, *S.G.D.I.* 4. 1, p. 494.

names in *S.G.D.I.* 1v.

⁴ For references see the Index of proper

⁵ Pape-Bauer, *Wörterbuch*, s.vv.

THE CABALIANS OF HERODOTUS

IN Herodotus iii. 90, in the second satrapy, along with the Mysians and Lydians, are included the Lasomians and the Cabalians and the *Τηγερεῖς*. A distinction is made between the Lasomians and the Cabalians. In vii. 76-77, three tribes are commanded in the army of Xerxes by Badres, son of Hystanes.¹ The first name has dropped out, the second people are the Maeonian Cabalians who are called Lasomians, the third are the Milyae. The words *Καβαλῆες* of *Μηλωνες* seem to make a distinction between the Lasomians and other Cabalians who are not Maeonians. Probably therefore the missing name in ch. 76 is *Καβαλῆες*, omitted by copyists under the impression that the same people were being counted twice over. But the historian really meant to distinguish between the native Cabalians and the Lasomians who were of Maeonian origin and presumably immigrants. Accordingly in iii. 90, instead of *Λασονίων καὶ Καβαλίων καὶ Τηγερεών*, we should perhaps read *Λασονίων καὶ Καβαλίων ἐγγερέων*.²

When Strabo records (p. 631) that the people of Cibyra are said to be descended from Lydians who occupied Cabalia, he no doubt refers to the same people whom Herodotus calls Maeonian, for though Lydians and Maeonians were probably originally distinct, the difference was so early obliterated that its existence was a matter of dispute, and Strabo himself decides against it (p. 625). At a later date Cabalia was colonized by Pisidians (p. 631). This was probably after the time of Herodotus, who never mentions Pisidians at all.

Four languages, says Strabo, were formerly spoken in Cibyra,—those of the Pisidians, the Solymi, the Greeks and the Lydians. On the preceding page (630) he had stated, no doubt on the same authority, that the Cabalians were said to be Solymi. It was mere antiquarian affectation to speak of their language as that of the Solymi, who were long extinct if they ever

¹ He commanded all three nations, *καὶ τὰς τρεῖς ἔθνη*. When only two nations were joined under one commander, as the Chrysaean and Armenians (ib. 73), Herodotus says *καὶ τρεῖς συνεπεσέοντο ἔθνη Ἀπέρχοντο*. The three tribes were therefore neighbours.

² Cf. *Alysiensis ἐγγραφὴ*, p. 47. *Τρεῖς πόλεις Ἀσίου* (St. Byz.) seems to be *Ἔρως* in Pamphylia. Towns in the Roman Lycia-Pamphylia

are often called Lydian, e.g. *Μασδῖανος*. If Stephanus preserves one of the numerous ancient emendations (see *Reich*, *Herod.* vol. ix, pp. 467, 468, etc.) it is in that case un sound, for *Ἔρως* must have been in the first satrapy, like Milyae which cut it off from the second; see *Strabo*, i. 24, 5, and *Strabo*, p. 631; cf. *Polybios*, v. 72, 6.

existed³ but there is no reason to doubt the fact of its survival. Pisidian and Greek were both probably of later introduction, but it is evident that in the time of Herodotus Cabalia must have been occupied by two separate races, the native Caballians or 'Solyimi' and the immigrant Maeonians or Lydians, speaking two distinct languages. These he seems to have distinguished in iii. 90 as Καββαῖοι ἑγγερέες and Λασιόνιοι, and in vii. 76-77 as Καββαῖες simply and Καββαῖες αἱ Μηίωνες, Λασιόνιοι δὲ καλεόμενοι.

W. ARSEWRIGHT.

³ See Eudocleus (Pliny, v. 30). The Solyimi of Cleodorus are a Lydian — Ptolemy in Laodiceon; *Πίλες αἱ ἐν Περσέλει* etc. ii. 3). They have no separate existence except

in Homer, where they are no more historical than Bellesphorus's other opponents, the Amazoni and the Clidæon. They were probably native Lydians.

THE BOSTON COUNTERPART OF THE LUDOVISI THRONE

IN the last volume of this *Journal* is an article by Professor E. A. Gardner entitled 'The Boston Counterpart of the "Ludovisi Throne."' In the following pages I wish to make clear that had Professor Gardner been more familiar with the marble itself of which he wrote, and had he not based his criticism mainly upon a study of photographs and casts, he could hardly hold the very poor opinion of it which he expresses. His article is difficult to answer point by point because statements of personal feeling are largely mingled with others of fact or assumed fact: aesthetic criticism is interspersed with archaeological statement and both, I believe it can be shown, with some misunderstanding and error. The article really refutes itself by proposing several alternative origins for the 'Throne.' Such a criticism is worth but little, if the criteria for detecting a forgery are so uncertain that the critic is not sure whether they prove the object Neo-Attic or modern.

That the two 'Thrones' are unique objects, the use and decoration of which are not yet understood in all points, is true. They also differ in style in a very interesting way. But Professor Gardner's suggestion that the Boston 'Throne' is a modern forgery is preposterous. He himself can do no more than point out certain peculiarities in the carving and design, which he calls 'awkward,' 'affected,' and full of 'artistic defects,' as proof of his suggestion. Many of these defects, however, do not exist in the original. Had Professor Gardner had more opportunity to study the original, he would realise that, no matter what terms he applied to the expression of the faces, they are not the expressions visible in the photographs he publishes. Also his suggestion that the surface may have been artificially weathered, as in the case of the Aegina marbles, would scarcely have been made had he been familiar with the original. Thorwaldsen's statement that it was difficult for him to distinguish between the original Aegina fragments and the restorations of his workmen, has little bearing on the marble under discussion. In the first place, Thorwaldsen when he made the remark, was unquestionably thinking of the statues as finished and set up after their surfaces had been cleaned and re-worked by his assistants so that the restored portions would not appear too obviously new, though they are still perfectly easy to distinguish. The Boston 'Throne' has fortunately not been man-handled in any such way and its surface is in exceptionally pure condition. That Professor Gardner himself is uncertain of his premisses is clearly shown by his stating that, though in his opinion the marble cannot possibly have the

fifth century origin which general consensus of trained opinion gives it, it may be 'later classical, probably Neo-Attic' or 'a modern imitation.' The assumption that it is a modern forgery appeals most strongly to him, for this he says 'best explains' its character. This idea he must, however, put out of his head. Had he applied to the authorities of the Boston Museum or to the well-known collector who purchased the marble, or even to some of us who were in Rome at the time of its discovery, had he, that is, examined all the available evidence, it is most unlikely that he would even have suggested the idea.

Leaving aside, then, the utterly groundless theory that the Boston 'Throne' is a modern forgery, there are left for discussion and criticism Professor Gardner's two other main contentions: the one that the marble is so inartistic and full of defects that it cannot be an original work of the fifth century, the other that it may be a work of the Neo-Attic school. I will discuss the second of these two theories first and it will be seen that Professor Gardner's obvious dislike of the marble has led him into exaggerated and inaccurate statement, and has obviously blinded the critical acumen displayed in his still most valuable *History of Greek Sculpture*.

It will, I believe, be admitted that the Neo-Attic school is distinguished by a lack of simplicity both in the conception of the separate works and in their execution. They are the expression of an over-refined spirit which took pleasure in extreme subtleties of thought and delicacies of technique, rather than in vigorous directness. Most of the bas-reliefs of the school are obviously intended as panels to be set, like pictures, in walls or else to form the ornament of marble vases (like the one by Sosibios in the Louvre) which probably served as decoration for public halls or gardens. The statues of the school show a similar character, as can be seen in the over-modelled and tense Torso Belvedere. In general, it may be said that the bas-reliefs are sentimental and the statues dramatic. Professor Gardner, in his *History* just mentioned, discusses these monuments and speaks of their general use as decorative panels (p. 42) and points out with entire justness how in them one sees the ' quaintness of conventional archaic forms . . . sought after for its own sake ' (p. 14). In other passages he calls attention to their 'conventional and imitative character' (p. 299), and finally and rightly calls them 'over-refined and affected.' Were one to read all the monographs by Hauser and others which have been published on the Neo-Attic school, one would learn nothing essential in regard to their quality that Professor Gardner has overlooked. His estimate of them is thoroughly sound and well-stated. He uses but one word I would question, and that is the word 'affected.' This implies a knowledge of the artist's mind which we do not possess. For a work of art to express affectation it must express feelings which the artist does not really have, but which he merely pretends are those which govern him. What would be affected in the critic need not necessarily be so in the artist. I dwell upon this point because Professor Gardner applies the same epithet—*affectation*—to the Boston 'Throne' and I hope to show that he is unjustified by anything but his own personal feeling in doing so.

If now, keeping the general characteristics of the Neo-Attic school in mind, we study the Boston 'Throne' we shall see at once that no matter how poor a work of art it may be considered it cannot be a product of this school. That is absolutely impossible. No one looking at it with a truly critical eye, can find in the figures which are carved on its three sides any trace of conventional or imitative forms. Were they so, there would not be the difficulty, which all students have felt, in explaining the meaning of the figures or in deciding to what school the artist belonged. Just as it is still impossible to be sure from what school the sculptor of the Ludovisi 'Throne' came, because there is no other monument which resembles it, so it is impossible to be sure about the Boston 'Throne.' At present these two marbles are unique, and resemble only one another. What, however, can be stated with certainty is that the Boston 'Throne' does not resemble in the slightest degree any known Neo-Attic monument. It has none of the decorative quality, the quality, that is, which shows itself when an artist desires to make a design pleasing in composition, colour, or chiaroscuro, without thought of anachronisms, or of giving any definite meaning to the scene represented. On the contrary, it is evident that the sculptor who carved the figures on the Boston 'Throne' had the intention of conveying a clear story by them, even if we are still unaware what that story was. Nor is there, as will be shown later, any trace of anachronism such as Professor Gardner suggests. Furthermore, the Boston 'Throne' does not repeat (even though it may recall) a single known type, nor is there any trace of over-elaborated modelling. Finally, there is no sign of the dwelling on archaic forms for the mere sense of their quaintness, which is the characteristic of archaistic work. This is not a mere statement of my personal judgment. Anyone who would prove the 'Throne' to be archaistic, must show in it signs that the sculptor possessed a greater knowledge of form and of technique than he wished the marble to display—that he was intentionally trying to hide his own capacities and reproduce the imperfections of an earlier age. This intentional self-limitation is the chief characteristic of archaistic artists in whatever epoch they may chance to live, and in one way or another they invariably betray themselves. Strange as some of the figures on the Boston 'Throne' are, and inexplicable as the main scene may, in our present state of knowledge, seem, it is still obvious that the sculptor in no way contradicted himself, and that the 'Throne' is aesthetically and technically united and self-contained.

Having now controverted Professor Gardner's arguments for the modern or Neo-Attic origin of the 'Throne' let us consider the evidence he brings forward against its being, as has been heretofore believed, a work of the fifth century B.C. It is, of course, admitted by everyone, that, whatever the original purpose of the Ludovisi and Boston 'Thrones,' they were in all probability pendants one to the other, and were made by different artists. Professor Gardner mentions the frieze of the Siphnian Treasury at Delphi as showing great differences in style between different portions, but overthrows the suggested comparison by pointing out that it is still a matter of

dispute whether the differing fragments really belong to the same frieze. There are, however, other monuments which show similar differences in style between different portions. For instance, the two pediments at Olympia, and the metopes of the Parthenon. Or, to take a still more striking case, the small marble statue from Sunium, now in the New York Museum, in which we see a pre-Persian body crowned by a post-Persian head. It is obvious that in the fifth century B.C., before the art of sculpture had been completely mastered, the Greeks were not offended by contrasts of this sort. With such examples in one's mind, one cannot agree with the statement in Professor Gardner's article (p. 74), that the 'difference between the Ludovisi and Boston portions' is 'inexplicable.'

Professor Gardner next goes on to discuss the subject of the Boston 'Throne,' and points out (but in a way that seems to imply his disagreement) that 'its very strangeness has been used as an argument in favour of its genuineness.' A perfectly good argument this is too, but Professor Gardner is putting the shoe on the wrong foot. He must remember that he is almost the only archaeologist of note who doubts the genuineness of the Boston 'Throne.' The rest of us, who see no reason to question it, do not bring forward the 'strangeness' of the scene to prove its authenticity, because the 'strangeness' is easily explicable by our ignorance of much of Greek thought, but we would ask Professor Gardner, or anyone else who doubts the marble, to show us any recognised forgery that shows a similar strangeness. The 'Throne' is by no means the only bit of ancient sculpture the meaning of which is not clear, and yet we can scarcely think that Professor Gardner will attempt to prove the Harpy Tomb or the headless figure of a youth found at Subiaco and now in the Museum of the Terme in Rome to be forgeries because he cannot explain them.

The two principal seated figures are called by Professor Gardner 'affected and theatrical to a degree,' and, although he finds similar contrasts in emotion shown in the work of fifth century vase painters, he thinks it unlikely that contemporary sculptors should show any such feeling, and that the explanation lies in the Boston 'Throne' being a 'direct imitation' (I suppose he means of the vase by Duris, which he mentions) or a 'survival in later times of similar mannerisms.' If, however, it is a *survival*, he must admit that such treatment existed in early times. It certainly did, and was very characteristic of the sculpture of the best epochs in Greece. One of the earliest instances is found in the Vaphio cups, which show a marked and intentional dramatic contrast; another is seen in the Olympia pediments. The seated old man in the East pediment, for example, is clearly intended to exhibit a dramatic contrast to the other figures, and several of the Lapiths show the same in comparison to the fighting centaurs. So, too, strongly dramatic contrast is shown in many grave reliefs, and a stronger expression of it would be hard to imagine than in the Athena and Satyr of Myron's famous group.

Beyond these questions of feeling there is the final one of style, and it is in the study of this that Professor Gardner lets his lack of interest in, or

his lack of appreciation for the Boston marble betray his critical judgment. He points out that the marble does not illustrate as plainly as many others the principle of compressing the reliefs 'as it were, between two planes, the plane of the background and the original front plane of the slab.' This principle is, as he justly remarks, a very common one in many early reliefs. Had he, however, studied the Boston 'Throne' in front of the original itself he would have seen that his statement, that it 'shows no trace whatever of this principle,' is a great exaggeration. So, too, it seems to me exaggerated to say that the figures 'are in the round clumsily flattened against the ground of the relief.' But not only does Professor Gardner go too far in making these statements, he also deceives himself in laying altogether too great stress on the principle of the compression of reliefs between the background and the front plane of the slab. While many sculptors followed this rule, very many others did not, and it is easy to mention several 'genuine early Greek reliefs in which the projection of the figures varies so much and the planes of the relief are so completely ignored.' Before mentioning these, it is worth while to point out one peculiarity of the two 'Thrones' which seems to have escaped Professor Gardner's notice. If the front plane (original plane of the slab) is much more noticeable in the Ludovisi than the Boston 'Throne,' the back plane is much more truly kept in the latter. In fact, when one looks from the end along the main scene of the Ludovisi 'Throne' one will notice that the back plane is not kept at all, but rises forward or sinks back like the surface of the sea. So much for the keeping to the front and back plane of the Ludovisi example. Now let me mention a few genuine Greek reliefs in which the figures project. One such, of a rather earlier date than the 'Thrones,' is in the Boston Museum. It represents a mounted warrior, and it is obvious not only that the figure was not compressed between two planes, as Professor Gardner thinks all genuine early reliefs should be, but also that the head of the horse was in the full round (Fig. 1). Again, in the metope of a fallen warrior from the Treasury of the Megarians at Olympia there is diversity of planes, and one sees traces, though less marked, in the *Asses* frieze and the Harpy Tomb. Surely the compression between two planes is not the most noticeable feature of the metopes from Selinus and Olympia, and Professor Gardner's condemnation of the Boston 'Throne' on the score that the figures are really in the round and only clumsily flattened against the background falls with equal force on many of these metopes, or on the figure of Apollo in the tomb relief from Thasos, which is in the Louvre. And what would he say to the figures decorating the columns from Ephesus or to grave-reliefs which can be seen in the British Museum?

The next point Professor Gardner takes up is the composition of the Boston reliefs, in which he finds many defects. He points out that the two seated figures of the main scene project beyond the field of the relief. Instead of this being an error in the composition it is a very subtle excellence for if it were not for this projection that of the figures on the sides would be very ugly when the larger relief was looked at, as one can see

in the Ludovisi 'Throne,' which in this respect is less excellent than the Boston one. Furthermore, the Greek sculptors did not always, by any means, consider themselves bound to consider the edge of the slab as the fixed outside limit of their composition. On the Harpy Tomb the winged creatures and other details project into the moulding on the sides and top, and in the grave stele of a warrior found at Pella and now in the museum at Constantinople, the real field of the design is scarcely considered, yet this stele is neither a forgery nor inartistic. The Hegeso relief in Athens



FIG. 1.—RELIEF OF HEROESMAN IN BOSTON.

is another case where the artist did not mind having the design spread over its assumed frame, and one who would call it clumsy or inartistic would be a stickler for rules and incapable of understanding art or artists. These are just a few of many cases which could be mentioned, which show that it is an uncritical attitude of mind which presupposes rules formulated, more or less, from modern practice and then blames the ancient Greek artists for not obeying them. The same relation visible in the Boston 'Throne'

between the scene carved and the more or less fixed outline of the block, the bold and original way the material is treated, are typical of the best ancient Greek work and quite unlike Neo-Attic productions or those of modern forgers.

Other criticisms by Professor Gardner of the composition of the figures on the Boston 'Throne' are equally *mal à propos*, or so exaggerated as to be untrue. He says that the wings of the Eros 'instead of filling the vacant space of the background, are awkwardly hidden behind the two seated figures.' This is not the case, as it is only the very tips of the wings which are hidden and one arm partially hides one wing. Furthermore, I would suggest that this manner of composing the figures so that they are shown to be in front of the Eros is not so stupid as it seems to Professor Gardner, but was done to suggest that the Eros was not really visible to the two seated women—much as the spiritual rather than the actual presence of Athena is suggested by her statue placed behind the warriors in the Aegina pediment, and the Apollo partly covered by the Lapiths on the temple at Olympia.

Another peculiarity, says Professor Gardner, of the Eros and the two seated women, is the 'attempt to render them three-quarter face, in the heads of all three and in the upper parts of the bodies of the two seated figures.' This would be a peculiarity did it exist, but it does not do so. The head of the Eros is full front, and so too are the bodies of the women, and if Professor Gardner will ask a model to take this pose he will find that the body turns as nearly as possible full front without any unnatural strain. His criticism of the modelling of the breasts is, one must believe, founded on photographs, the lighting of which has deceived him, for on the original they do not seem 'distorted.' Nor does it seem to me that these seated figures are particularly exceptional in idea. There are several examples of sculpture from the fifth century which show that there were many artists at that time who busied themselves with the treatment of figures seated and turning their bodies. One of the most remarkable is the metope from Olympia representing Athena seated on a rock; others occur in terra-cotta, such as the 'Electra' relief in the Louvre and one in the British Museum, while the Penelope statue in the Vatican is an example in the round. I do not mean to imply that any one of these is in every detail like the Boston figures, but I do mean to say that they all exhibit similar imperfections in the rendering of the pose and that the Boston figures are perfectly true to fifth century style.

As for the expression of the faces in which Professor Gardner sees a 'feeling of caricature,' I can only say that they do not impress me in this way, nor does the obviously intentional differentiation in the expressions seem to me 'alien to early Greek sculpture.' The faces of the figures of the Olympia pediments are full of a similar dramatic contrast in expression, and I think no one will doubt that it existed between the fallen giant and the Goddess striding over him in the metope at Temple F at Selinus. It certainly was common enough a few years after the Boston 'Throne' was

made, and so we can hardly doubt was attempted by the earlier artists. The vase painters who were contemporaries of the sculptor of the 'Throne' represented dramatic contrasts in facial expression often enough, and so even if the artist of the 'Throne' succeeded only in giving 'a feeling of caricature,' as Professor Gardner thinks, still his attempt is exactly what one would expect, and entirely unlike anything to be seen in the Neo-Attic school.

In this part of his criticism, as in others, Professor Gardner also goes too far in mixing supposition with fact when he says, 'Throughout there is the greatest possible contrast to the simple and unaffected treatment of the face which we see in the three extant heads of the "Ludovisi Throne."' The faces of the two side figures on each 'Throne' are in repose, and Professor Gardner admits that there is at least a 'clumsy effort' shown in the youth on the Boston 'Throne' to 'imitate the simplicity of the central figure of the Ludovisi relief.' So far as the heads on the Ludovisi 'Throne' are preserved they show quiet expressions, though to my eye there is a very distinct contrast between the expression of the 'Aphrodite' and the nude maiden. But no comparison is possible in this regard between the 'Aphrodite' group and the 'Eros' one, for in the former only one face is preserved and we have no notion what the expression on the other two faces was. For this reason Professor Gardner's comparison of the Ludovisi side figures or the one head remaining of the chief scene with the group of faces on the Boston relief has little or no point.

The draperies of the two seated women on the Boston relief can, according to Professor Gardner, hardly have been carved except by a sculptor who had 'seen at least the frieze of the Parthenon and the Attic tomb reliefs.' This statement is, of course, more the expression of a general feeling than a real criticism, and I may, perhaps, be permitted to express my feeling that there is more essential likeness to the work of the Parthenon in the folds that play hide and seek with the lower leg of the left-hand figure of the chief Ludovisi relief than in anything shown by the Boston figures. If the sculptor of the latter did know the Parthenon he certainly failed utterly to reproduce its fundamental qualities.

There is, however, little to be gained in a discussion of this sort by merely stating my feeling against Professor Gardner's. What is needed are actual examples and, so far as may be, proofs. So I will only say that I cannot agree with what he says of the difference in the treatment of the hair of the Ludovisi and Boston figures. It seems to me in all essential points the same. The narrow band in the hair of the old woman on the Boston 'Throne' is of the same fashion as that worn by the Myronian Persons in the British Museum or as that seen on certain Sicilian coins.

In what he says of the hands and feet of the figures Professor Gardner exaggerates once more. As for the hands, those on the Boston 'Throne' do not seem to me either so 'affected' in pose or so accurately realistic as he says. In pose they but show the daintiness that one sees again and again

in early Greek art. The hands on the Ludovisi 'Throne' are noticeable chiefly for their absence, but in shape of heavy wrist and long-jointed fingers those which remain are very like those of the Boston figures, while the spreading of the fingers of the woman playing the pipe is similar to that of the fingers of the lyre-player and due to a similar cause. Nor does the contrast seen by Professor Gardner in the feet on the two 'Thrones' seem to me to exist. Those of the Kros are without doubt bad, but the problem the sculptor had was an almost impossible one to solve and he did it much in the same way as the sculptor of the Athena in the Olympia Metope representing Hercules cleaning the stables and of the Hesperid in the group with Atlas and as the sculptor of the Thanatos on the column from Ephesus did. Of the feet in the Ludovisi relief he says 'the soles are flat and firmly planted on the ground' while on the Boston relief 'they are soft and supple, and adapt themselves to the contour of the surface they rest on.' Now it is not uncommon in early Greek art to find the feet of figures adapting themselves to the surface they rest on, nor does the contrast suggested by Professor Gardner between this detail of the two 'Thrones' exist in fact. For instance, the toes of the figure burning incense on the Ludovisi 'Throne' bend over the foot of the burner in exactly the same way, though not so much, as do those of the Boston lyre-player over the scroll. But even more marked are the feet of the attendant nymphs in the chief Ludovisi relief which bend and conform themselves to the contour of the pebbly ground in a very noticeable fashion. In fact there is a very clear resemblance and no contrast, between the two 'Thrones' in this detail.

Of course one must agree with Professor Gardner when he says that the two scales with the small figures standing on them are strange, but one will find it difficult to agree with his argument about them. His comparison of the figures to works by Barne-Jones need not be treated seriously for it is obviously intended humorously, but he must show some proof much more positive than their mere strangeness before we can agree with him in thinking that they 'alone suffice to prove that we have not here a genuine early Greek relief.' Their length is due to the bodies being stretched out by the figures standing on tip-toe while their arms are held high over their heads. The shape of the head of the left-hand figure and the long thin feet of the one on the right-hand are true to the early style. In the left-hand figure Professor Gardner sees late characteristics in the 'graceful poise of the body, with its curved median line, and the studied absence of symmetry between the two sides, combined with the slender form.' I have already spoken of the slender form and will merely add that from the Apollo of Tenos to the Apollo on the Omphalos, slenderness was often emphasised by the early artists. As for the absence of symmetry I cannot see wherein this differs from that which one sees in many early figures shown in tense positions: while, finally, the curvature of the median line is scarcely greater than in such figures as the Harmodios and Aristogiton and not as great as (though much more intelligent than) that of the small bronze from Ligourio now in Berlin.

Nor is it greater than in a bronze figure (Fig. 2) in the Boston Museum which is also of equally slender proportions. Furthermore, this figure shows an attitude almost exactly similar to that of the Eros and has the same 'cheerful grin' which Professor Gardner would have us believe is 'alien to early Greek sculpture.'

I have now considered in detail the arguments adduced by Professor Gardner to show that the Boston 'Throne' is not only a poor work of art but probably a modern forgery, though he seems shy of saying this in so many words and hedges on its possible Neo-Attic origin. Certainly some of his arguments are exaggerated and based on ill-considered statements. Nor does he add to their force by his suggestion that the 'Persephone' of the Boston 'Throne' is based on the well-known statue of Penelope. As for the likeness of the head-dress he can hardly suppose the Penelope was the only statue ever made with this arrangement, besides which the girl burning incense on the Ludovisi 'Throne' has exactly the same. Lastly, his suggestion that the relation of the distance between the breasts and the distance from them to the thigh of the 'Persephone' is due to the sculptor copying a badly taken photograph of the Penelope can only be called far-fetched. In the first place it is by no means obvious how he took his measurements to make out that 'the width between the breasts is actually greater than the height from the breasts to the line of the thigh.' If he will pose a living model he will find the measurements not so far wrong as he thinks. Finally, why should even the stupidest modern forger use a bad photograph of the Penelope when casts can be easily procured or the original seen every day by anyone living in Rome?

Thus, while we may all agree that the Boston 'Throne' is not as beautiful as the Ludovisi one, and while there are points in it which are as yet not perfectly understood, we may rest assured that the general consensus of opinion is right, and that it is a work of the fifth century.

RICHARD NORTON.



FIG. 2.—BRONZE STATUETTE IN BOSTON.

FURTHER NOTES ON THE SCULPTURE OF THE LATER TEMPLE OF ARTEMIS AT EPHEBUS.

[PLATE VIII.]

The Square Pedestal.—In some notes on the sculpture from the Artemision at the British Museum, printed in the last volume of this *Journal* (p. 87), I suggested that the fragment No. 1201 most probably belonged to a relief representing either Herakles in the Garden of the Hesperides or Herakles and the Hydra. Subsequent examination and the attempt to make a restoration from the given data have made me sure that the former was the subject of the sculpture. Only this would account for the quiet action of the left hand of Herakles and for the closely associated female figure. If this were indeed the subject, how could its normal elements be arranged so as to suit the conditions of the square pedestal



FIG. 1.—FRAGMENT OF PEDESTAL.

having a vertical joint in the centre, and making proper use of the existing fragment of which Fig. 1 is a rough sketch? This question I have tried to answer. The fragment is now fixed in the side of a built-up pedestal close to its left-hand angle, but there is nothing which settles this position and it is a practically impossible one, for there is not room left in which to complete the figure of Herakles. If, however, we shift the piece to the right hand half of the pedestal, and sketch in the completion of the two figures, we at once see how perfectly the tree and serpent would occupy the centre of the composition and leave the left-hand space for the two other

watching maidens—the whole making a symmetrical group. The hypothesis works out so well that we may accept it as being practically proved that the relief represents *Herakles in the Garden of the Hesperides* (Fig. 2). The beautiful Meidias vase in the British Museum furnishes an interesting parallel to the composition. Two of the maidens are on the left of the tree and a third Hesperid with Herakles are on the right. That Herakles

might carry a bow in this subject is shown by another relief (Reinach, *Reliefs* ii. 162). I may point out that enough remains of the figure of the Hesperid on the right to show that she wore a split chiton tied round the waist with a girdle. The position of the girdle shows that the fragment is fixed about five inches too low; it should also be brought out further to give higher relief to the sculpture.

Further consideration of the block No. 1205, from a pedestal, has convinced me that a combat with a Triton, rather than with a Centaur, was represented. I mentioned some of the facts before and it is easy to frame a scheme of restoration with a Triton while it is impossible to do so satisfactorily with a Centaur (Fig. 3). The combat of Herakles and the Triton has been found at the early temple of Assos,



FIG. 2.—RESTORATION OF PEDISTAL.

pedestal¹ and the Triton pedestal were pendants to one another and related to the same general subject, *The Conquest of Nereus*. Doubtless the visit to the garden of the Hesperides followed next.

¹ See also Reinach's *Passei*, i. 246.

² I dealt with this pedestal before. For the type of hippocampus, compare Reinach's *Passei*,



FIG. 2.—RESTORATION OF PEDISTAL.

and an archaic group from a pediment discovered on the acropolis of Athens was practically exactly similar. In both of these Herakles approached the creature from behind as on our pedestal.¹ Water seems to have been indicated in front of the Triton, and other startled Tritons may have occupied the remaining sides of the pedestal; there seem to be some slight traces of a second one on the 'return' of the same block (1205). Such an arrangement would be similar to that of the four Nereids (1207-1210) on another of the pedestals. These Nereids follow each other to the right around the block; the Triton, however, faces the left, so that it is quite probable that the Nereid

i. 321; they had flappers in place of front legs. According to Pliny the Nereids of the great group by Sarpas each hippocampus

The fragment 1204 has on the left-hand face of the block 'remains of a deer and of a draped female figure standing beside it, who seems to be placing her right hand on its horns; she wears a bracelet. If this group is connected with the labours of Herakles, it may be supposed to be Artemis with the Karyneian stag' (*B.M. Catalogue*, p. 173). The animal is small and slender, and I cannot see any evidence for horns: it is probably intended for a fawn. The stately Artemis extends her right hand protectingly over the timid creature with a gesture of warning to something beyond which must have been on the other half of the same side of the pedestal. On the left-hand bottom corner of the existing part there is a piece of relief which I do not doubt was part of the neck of the hunted hind which would have been forced to the ground by Herakles in the way this subject is usually figured. 'On Attic black figured vases Herakles seizes the hind and Artemis intervenes to protect it' (Dar. and Saglio *op. cit.* 'Hercules'). In this fine subject we find a link between the stories of Herakles and of Artemis.



FIG. 4.—PART OF PEDISTAL.

It shows the goddess prevailing over the hero and was thus especially appropriate here. There is just enough left to suggest that the quiet, irresistible majesty of Artemis must have been in strong contrast to the violence of Herakles. Very probably it was one of the central pair of pedestals which bore this subject which may be described as *Artemis protecting the Karyneian stag from Herakles* (Fig. 4).²

One of the two most perfect of the pedestal-reliefs at the Museum represents the struggle between *Herakles and Kyknos* or another giant (compare a seal in the British Museum figured by Darenberg and Saglio *op. cit.* 'Hercules'). The design of this group is easily made out. So is that of the other of

these pedestals which I before suggested represented the story of *Herakles and Omphale*.³ As restorations of these should be better than rough

² I have forgotten the head of the animal, which was a plain ring on the wrist (compare one of the Muses); it may be enough to suggest that Artemis was not dressed for the hunt.

³ The story of Herakles and Omphale had a local interest at Ephesus, and the representation of it would be specially appropriate at a temple where 'retainers masquerading as women'

serviced Artemis (*H.S.A.* xvii. p. 102). For Omphale in art see Roscher's *Lexikon* and an article by Lechat in *Revue de l'art ancien et moderne*, 1912. The latter remarks that in these scenes Herakles is made to appear drunken and ridiculous. This perfectly describes his figure on the pedestal from Ephesus: sometimes he carried the thyrsus of Dionysos, and

diagrams, I have not illustrated them now, but I may do so in the future.

There is every reason to suppose that the adventures of Herakles were dealt with very fully on the pedestals at the entrance front of the temple. There is no difficulty in accounting for this: the story was the favourite one for metope-like sculptures, it was treated at Delphi, Olympia, and at the 'Thöseum.' The tales told that some of the hero's exploits were performed near Ephesus and according to one account he was the founder of the temple. So far as we know the only subjects on the pedestals which did not directly refer to the exploits of Herakles were some which represented *Victories leading animals to sacrifice*. In the *Catalogue* the block 1212 is described thus: 'On the front is half of a group of a Victory leading a sheep . . . On the second face a bull is led to the right by a Victory.' Of the latter subject only the fore-legs of the ox and the advanced left foot of the Victory remain. The position of the legs of the ox show that it was running and the Victory was doubtless checking it (Fig. 5), a motive which is found on the Nike balustrade which was itself adapted from a group on the frieze of the Parthenon. The attitude of the sheep on the other face of



FIG. 5.—RESTORATION OF PEDISTAL.

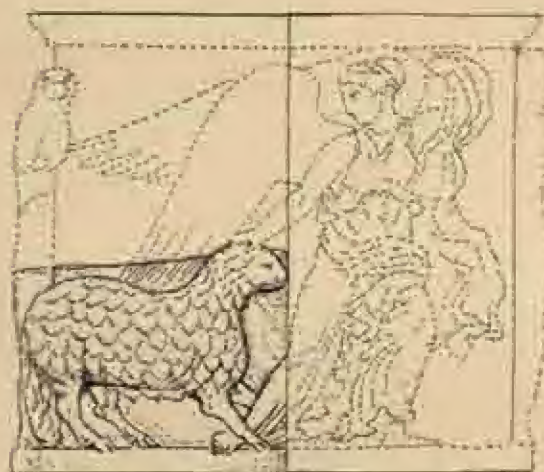


FIG. 6.—RESTORATION OF PEDISTAL.

this last may account for the stick on the relief. It is plain that this subject occupied more than one side of the pedestal, and it is possible that Ouphiaké may have stood in front

of Herakles and that the woman behind him who pulls off his lion skin is one of the queen's handmaids.

the same pedestal shows that it was being dragged forward by the Victory who here was in advance and must have been in an attitude very similar to that of the figure in front of the ox just mentioned on the Nike balustrade (Fig. 6). The resemblance between these sculptured groups at Ephesus and Athens is very close, not only in general design, but in the treatment of the forms and drapery. The two works must have some direct relationship. A Victory on a block at Epidaurus, referred to in my former article, is again very similar in style. There were probably at least two of the sculptured pedestals at Ephesus of this type disposed so as to balance one another.

A relief recently found at Ephesus, and now at Vienna (Fig. 7, from Reinach's *Reliefs*, ii. p. 142), has on it two Victories, one leading a goat and the other a ram.



FIG. 7.—EPHESIAN RELIEF IN VIENNA.

The former, who carries an incense burner, drags along the goat which resists just as does the sheep on our Ephesus pedestal. These compositions would perfectly suit square areas like the sides of the pedestals, and there cannot be a doubt that the relief was inspired by our

pedestal; indeed it is quite probable that it was copied from the missing sides or from other groups of the same series. It would be enlightening to have a cast of the Vienna relief set on the blank part of the pedestal in the British Museum.

The archaic temple at Ephesus not only had sculptured lower drums to the columns, but it also, I believe, had pedestals to the anas on which were carved oxen of which there are fragments in the basement of the Museum. These carved drums and pedestals, I have recently ventured to suggest,* had their prototypes in the sculptured dado slabs which surrounded the porches and halls of early buildings at Mycenae, in Asia Minor, and in Assyria. Several of the Lycian tombs show varieties of the same tradition. Such a *raison d'être* gives a further and conclusive reason why the sculptured pedestals and drums should have been erected to range at the same level. The carved drums had pieces of daila, as it were, wrapped around them.

The Sculptured Drums.—We saw before that the sculptured drums of the columns seem to have had from eight to ten figures surrounding them. The *Heracles* and *Thametes* drum certainly had eight. The drum of the

* *The Builder*, Feb. 6, 1914, p. 154.

Muses had nine or ten. The drum No. 1202 must also have had nine or ten figures which seem to have followed around in procession. I gain from it the suggestion that the figures were bearing gifts. Most of them were males in oriental dress and we may call it *the drum of the Persians*.

The drum No. 1211 had five figures on half the circumference. The lower part is lost, and also the exterior surface of the upper part. The sculpture preserved has the middle parts of a series of standing figures. There is no clue to the subject represented. The figures in order from the left are: (1) female figure standing closely wrapped in her mantle; (2) youth standing wearing mantle only, which passes over the left shoulder and round the body; (3, 4, 5, 6) four male figures standing, all wearing mantles; No. 6 makes a gesture with raised right hand. He seems to wear a ring on his thumb" (*R.M. Catalogue*, vol. ii. p. 77). The woman (1) seems to have had her right hand raised near her neck and covered by the mantle. The youth (2) is smaller than the *Thanaos* of the other column, his arm is very thin and immature. The woman (1) and man (3) stand close to this boy and partly behind him, regarding him. The three figures evidently make a family group of father, mother, and son (Fig. 8). It is somewhat similar to the family groups figured on the Early Christian 'gift glasses.' No. (4) was also a boy even smaller than (2), traces of his thin, drooping arm still exist. He was 'backed up' by the male (5)—his father—while (6) followed making a gesture like some of the figures on the Parthenon frieze who call for attention. All three seem to turn towards the group of three first described, which was almost certainly the centre of a composition somewhat similar to that of the *Hermes* column, thus:—



FIG. 8.—RESTORATION OF DRUM.

MAN ¹	FATHER ²	BOY ³	MOTHER ⁴	BOY ⁵	FATHER ⁶	BOY ⁷	FATHER ⁸	MAN ⁹
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¹⁻⁹ are existing figures.

Possibly there was a tenth linking figure at the back.

This composition is remarkably like that of a late relief from Ephesus, now at Vienna, which shows the boy *Commodus* between *Marcus Aurelius* and *Lucius Verus* with other figures engaged in the rites of sacrifice (*Reinach's Reliefs*, i. 145). Compare also a procession of men, women, and children going to the sacrifice from the *Asia Pacis* (*Reinach*, i. 235). The same type of subject occurs frequently on earlier *ex-voto* slabs, and there

cannot be a doubt that our sculptured drum shows an assemblage of citizens at the temple of Artemis.¹ This *drum of the Citizens* was from the east end or back of the temple, as was also the *drum of the Muses*. Now at the Apollo temple at Delphi there were sculptures of Apollo, Artemis, Latona, and the Muses. At Ephesus, Latona, Apollo, and the Muses would be quite appropriate subjects in a cycle relating to the goddess Artemis, such as there is every reason to suppose would be sculptured at one of the porticoes.²

Wood seems to describe the two last mentioned drums as if he thought both were fragments of one drum, but that would be an impossibility. It has been remarked in the *Catalogue* that the moulding below the figure of the Muses was wanting or was worked separately. The fact that the most beautiful of the drums, that bearing the figures of Hermes and Thanatos, was at the west, or the front of the temple, while the Muses' drum was at the other end will explain any small points of difference between them.

The sculpture of drum No. 1214 is in much higher relief than that of the other drums; it evidently had fewer figures, not more than six, and it was made in two courses instead of being in a single piece. All that is left is about half of the upper course. Doubtless the drum belonged to some of the inner columns of the portico. Indeed, this is practically proved to have been the case by the fact that its diameter is two or three inches less than that of the finer drums.³ The fragment is much decayed in parts, probably from causes at work—such as running water—since it fell. Other portions of the surface which are more intact show that the sculpture was of better workmanship than at first sight appears. The height of the upper course of the drum is 2 feet 11 inches, and this is less than half an inch under the half of the drum No. 1200 which preserves its full height. Obviously, therefore, both courses of the divided drum were about three feet high.

On the existing fragment are the upper halves of two figures which are thus described in the *Catalogue*: 'Two male nude figures as far as the waist where they are cut off by the joint of the drum. They face each other. The figure on the right holds up in both hands an object curving to the left and resembling a branch. The figure on the left wears a mantle, and a mass of the drapery seems to be gathered in a bunch on the top of a staff, on which the right hand is resting. The left hand is extended.' The main facts of this description are well observed. The 'branch' is thicker upwards and it seems to be pulled rather than held up: The man who grasps the branch was tall, had shaggy hair, a moustache, and doubtless a beard. The biceps of this man are in strong action; the grasp of his right hand is taken as high up as his head towards the top of the branch. The man's right shoulder is thrown up against his chin, and his brow is puckered under the stress.

The other figure is of the athlete type. He has the thick muscular neck, full chest, and developed arms of a 'professional.' The right hand of this figure hardly rests on a staff because it could have been little higher than a

¹ Cf. 'the Magistrates' of the Parthenon.

² I gave a slight restoration of the drum of the Muses in a little book entitled 'Greek Buildings.'

³ I find that Wood was also of this opinion. He says that it was found on the north side towards the west, and was 'probably from one of the inner columns of the peristyle.'

walking stick. It is not certain that the action is not that of throwing off a mantle or lion skin.* If the hand rests it might be on a weapon like a club. The left hand is advanced as if to seize the branch. The subject of this drum can hardly be anything else than *Theseus and Sinis*. Sinis was the strongest of men, the contest was a trial of strength, and the test was the bending of pines' (*J.H.S.* vol. xxxiii. p. 300). Sinis pulled down a pine, caused the traveller to catch hold, then suddenly let go. The pine sprang up and the traveller was tossed into the air (p. 299). Theseus, however, easily accomplished the task, and Sinis was 'hoist with his own tree. On our sculpture Theseus is about to do easily what Sinis could hardly perform with his utmost strength. This exploit of Theseus is again represented in Ionian sculpture at the Heroon of Trysa (Baundorf, Pl. XIX. 14). Here again the moment of the story which was selected by the sculptor was the bending of the pine: 'Among the scenes is one, fairly well preserved showing Theseus alone in the act of pulling down a large pine tree with splendid vigour. Sinis is not present and here at any rate it is the actual bending of the tree that is the important thing and the immense strength that the hero puts forth' (*J.H.S. Judaea*, p. 300).

One point that may be urged against the identification of this subject on the Ephesus drum is that the 'branch' comes down from outside the subject and a complete dwarf tree does not appear to have been shown. Of course parallels might be brought forward like the much more remarkable *Heliös and Selene* of the Parthoson. As, however, it will hardly be maintained that the giant is struggling to hold up a branch but little bigger than a hockey-stick, which he grasps close to its upper end so that it could not be swung as a weapon, it seems that it must be granted that he is pulling it down. It may now be questioned whether the bender of the tree at the Heroon of Trysa is not Sinis. The figure seems to be that of a mature man, rather than the youthful form of Theseus, and the immense effort would be more appropriate for Sinis. Behind the bender of the tree appears a mutilated figure who was represented as approaching the scene of contest. Surely this was Theseus.

If we attempt to make a restoration of the group it at once becomes evident that there could not have been room in the height of the two courses to complete the figures in ordinary standing attitudes. The probable action of Sinis is explained by the Tryes relief; he must have been leaning forward with his whole weight on the branch, while Theseus must have been seated, doubtless with his legs turned to the left and his body twisted (Fig. 9).



FIG. 9.—RESTORATION OF DRUM.

* Cf. the Yarn of Cithon.

In this order while the throne of Hades is at one end and the waiting Herakles at the other, Alkestis and her conductor Hermes form a pair at the centre.¹¹ Dr. Robert, I believe, found the reason for this subject being here in some relation between Artemis and Alkestis. It is far more probable, however, that it takes its place in the Herakles cycle. As we have seen the adventures of Theseus were certainly represented on some of the drums in the entrance portico. It is thus highly probable that the Herakles cycle and the Theseus cycle together occupied both the pedestals and drums of the Western portico, while a cycle relating to Artemis adorned the Eastern columns.

After working over the questions concerning these sculptures, and having looked at them carefully for a long time, I feel that their full value as great art is hardly yet appreciated. If the drum which is sculptured with the story of Alkestis is not by a known artist, the master who wrought it was none the less great. As in the case of the Parthenon sculptures, if there is doubt as to the artist there can be none as to the art. If Scopas did not carve Alkestis and Thanatos, it may be asked if we have any reason to suppose that he could have done so well.

The improbability as to this drum having formed part of the particular column which was said to have been carved by Scopas is sometimes put in an extreme form. It happens that it is the best preserved of the fragments, but it may be allowed that if all the columns had been discovered none of them could be more beautiful than this. We know the general design of about a dozen of the sculptured columns, that is, of a third of the recorded number. Of those which were in the chief portico, we have evidence regarding about half of them. Put in this form there are about equal chances that the most famous of the column sculptures should have survived.

The exquisite sculptured group now in the British Museum may claim to be the most beautiful relief in the world excepting the frieze of the Parthenon. As a work of art it rests balanced and serene in temper between the old restraint and the new freedom, the old hardness and the new pathos. It is perfect both in composition and in handiwork. Dr. E. von Much has well observed that 'in the folds of the drapery, lightly held up in the hand of the woman, the seemingly impossible has been accomplished.' He values this drapery above that of the Olympian Hermes, 'it is so light and airy.' Some of the other reliefs are a little inferior, but Michaelis calls them collectively 'most beautiful, . . . the consummate art of the Fourth Century.'

¹¹ There was a famous statue of Hekate in the temple. Hekate, Persephone and Hekate appear together in the House of Hades on a vase-painting (Reinach I. 198). Notice the clear interval between this group on the column and the others who are moving away from it. W. Klein has, so lately as 1925, supported the interpretation of the scene as the Judgment of Paris (this however will not account for the action of the groups just described or for other points like the sword of Thanatos). Further, we have the direct connection of the Alkestis story as one

of the exploits of Herakles; also the remarkable resemblance of the principal group to the Eurydice relief where a similar theme is treated in a similar way. The Hermes on our column is very like a Hermes on one of the vases on which are painted the Judgment of Paris, but this type of figure was one of the commonest motives in fourth-century art. For the last word on Thanatos see *Siebert* 1909. The main motive, as Hager has pointed out, is a leave-taking. The figures fall into two groups between which is an interval.

The artistic relationships of our reliefs are with the Nike balustrade and the works at Epidaureis, which I mentioned before. The drapery closely approximates to that of the Atalanta of Tegea, a work of Scopas. The slabs from the eastern frieze of the Mausoleum, which are now accepted as examples of the style of the same artist, have flying drapery similar to that of the figures on the Ephesus pedestals, and the body of one of the Amazons has the same remarkable suggestion of softness as the texture of the flesh of the Thanatos. Again, the raised, thrown-back head and open mouth of Hermes seem to be characteristic marks of the style of Scopas, while the human and pathetic appeal of the Alkestis scene harmonizes well with what is known of his ideals. The beautiful Alkestis group is certainly remarkably like the well-known Eurydice relief, which must have had a considerable reputation, as it was repeated in many copies; and it may have been by Scopas. I am convinced in any case that the magnificent Ephesus relief is a work by Scopas. The probability emerges that the Nike balustrade may be his also. If Scopas indeed worked at Ephesus, we must in consequence of his age and reputation suppose that he occupied a position analogous to that of Phidias at the Parthenon. The sculptured drums and pedestals of the columns of the porticoes seem to have been the only external architectural sculpture; certainly there was no frieze. It is quite possible that Scopas devised the whole scheme as he did at Tegea. Collignon suggests that he may have had his atelier at Ephesus and that he there executed his other Ionian commissions. Furtwängler remarks that 'as no other artists are named in connection with the rest of the reliefs they were probably made by his colleagues and pupils' (*Masterpieces*, p. 301). Rayet, who has given the best photographic plate of the Hermes drum, points out that the figure of the messenger-god recalls the manner of Polykleitos; this is particularly noticeable in the design of the muscular forms of the body which are most beautifully planned and rendered. 'The artist has conserved intact the great traditions of fifth-century Attic art, and one may easily forget that nearly a century separates this sculptured column from the frieze of the Parthenon. We have not of its own epoch any decorative work which can be equated with it' (*Monuments* II. 74). I began my enquiry with doubts and an open mind. I close with the belief that the Ephesus sculptures should be assigned to Scopas and assistants working under his direction.

Details of the heads of Thanatos and Hermes are given on Plate VIII. and an unpublished fragment of a fine female head is also illustrated in Fig. 10. This last has its surface beautifully preserved; it is thus very valuable as an example of finish and of the treatment of hair. The head of Thanatos follows a feminine type, it is remarkably like the best preserved of the heads of Amazons on that part of the Mausoleum frieze which is assigned to Scopas. The head of Hermes in form, expression, and the treatment of the hair resembles very closely the head of the Meleager by Scopas in the finest existing copy, that of the Fogg Museum, Cambridge, U.S.A.

The Pediment.—There were no sculptures in the pediment. It was the opinion of Wood that some fragments of sculpture which he found came from

pedimental figures. These were a part of an arm, and a fragment of an elbow, both found at the West End, being parts of figures estimated as having been about eleven feet high. The toe of a colossal figure was also found at the East End—'It may be presumed that the pediment at the East End contained sculpture as well as that at the West End.' Two small fragments of arms and one toe are entirely insufficient evidence for colossal groups of sculpture when it is otherwise next to impossible that such sculpture can have existed.



FIG. 10.—HEAD FROM TEMPLE OF ARTEMIS.

Sculptured pediments were unusual in Ionia. The small temple at Priene which copied Ephesus so closely had no such groups. The immense scale of Ephesus is another reason against sculpture. No architect would venture to load the epistyle over the enormous central columniation of the portico with colossal figures. Indeed it is possible that Ephesus, like Magnesia, had openings in the field of the pediment to lighten it; we may not doubt that some special precautions were taken to relieve the long stone beam from as much weight as possible. Again, a stone of the pediment 1232 (2)

(the second piece catalogued with it belonged to the archaic temple) shows that the gable end was faced with masonry laid in small courses and was not covered with great slabs. This is practically a proof that there were no sculptures. In the recently issued volume on the Croesus temple this stone has been taken to belong to that building but it certainly formed part of the later temple as is shown by the claw tooling. It had a band of small projection following the slope of the pediment. This suggests that, as at Priene and elsewhere, the pedimental cornice was not so deep as the horizontal one.

I may say here in regard to the great epistyle over the enormous central bearing that there could not have been more than one such beam in the temple. This was the stone which gave rise to Pliny's story about the architect's anxiety; it was a *tour de force*, a stone to wonder at. The back of the temple *must* have had an extra column and the inner beams and ceiling of the peristyle *must* have been of wood. No fragments of lacunaria have been found and the famous cedar ceiling of the temple was probably that of the peristyle. It may be pointed out that if, as suggested, there were nine columns at the back portico, two rows of sculptured drums on that front would give half the number mentioned by Pliny. Then for the entrance portico there were eighteen also for the two front rows and the pair between the centre. It is now known that the temple of Samos had eight widely-spaced columns in front and nine at the back.

W. B. LETHBRIDGE.

NOTE ON THE ILLUSTRATIONS OF THE HEADS.

The difference of character between the head of Hermes and that of Thanatos is well brought out on Plate VIII. It may be mentioned that Furtwängler says that drooping hair is appropriate to under-world deities. The hair of the head, Fig. 10, is also noteworthy. It seems to be streaming in the wind, and the fragment consequently belonged rather to a relief than to a statue. It is said, in the Catalogue, to be of Paros marble, but on comparing it with the fresh fracture on the pedestal (290), which has similar large grains, the head and the pedestal appear to be of the same marble. Thus the evidence points to its having been part of the column sculptures. Assuming that this was the case one is drawn to think of the Nereids of the pedestal of whom there is evidence to show that their tresses were blown out in this way. If it were so the Nereid was looking back over her right shoulder. In any case this is a beautiful fragment.

THE DOUBLE FLUTES

If we are seeking an authoritative solution of the outstanding problems of ancient Greek music, it would seem that the most valuable assistance could be got from a consideration of the αἰλές, inasmuch as specimens more or less complete are to be found in plenty, scattered through the museums of different countries: in practice, this study has been found the most puzzling of all. Though many of the bodies of such flutes have been found, the mechanism of the mouthpieces, at once the most important and the most perishable portion of the instrument, has naturally disappeared, and all hope of extraneous aid from vase-pictures seems to vanish when we notice that in all the later pictures the mouth of the player, and consequently the mouthpiece of the instrument, is hidden by the *φoppela*, a band passing across the mouth, and encircling the head of the player.

Still I hope to show that not all these difficulties are insuperable: for example, much of the mystery of the *φoppela* disappears when we see two terracotta figures of dancers wearing the *φoppela* without the flutes.¹ It is then clear that this band held the flutes rigidly in place, and we are able to form some conclusion as to the shape of the mouthpieces; but this will be discussed later.

Before settling down to a consideration of the positive knowledge attainable on the subject, it is, however, necessary to brush away some of the cobwebs of speculation or absolute error that have gathered in men's minds. Any knowledge that we can glean can come only from three sources:—the writings of the Greeks, the vase-pictures and statuary, and the discovered instruments. And here I would plead strongly for the uncompromising rejection of statements by late or by Roman authors which are entirely uncorroborated by the other sources of information, or which are contrary to known physical facts. As an example of the folly of such I need only cite the remarks of Vitruvius on the construction of theatres: he avers that in the auditorium were constructed jars resonating to the notes of the diatonic, the chromatic and the enharmonic genus, and that the actor turned towards these jars as he was singing to increase the resonance of his voice. The evident absurdity of this does not affect the present question; but it is paralleled by the pretence of Varro² that

¹ F. Lenormant, *Terracottes Antiques*, vol. 1. Pl. 57 bis, and vol. II. Pl. A 4.

² *Res Rust.* 1, 2, 16.

one of the double flutes played the melody in unison with the voice; while the other played the accompaniment; remuneration beyond the dreams of avarice awaits the music-hall performer who will present even a colourable representation of such a feat. No practical musician would admit for a moment the possibility of two such flutes as are depicted on the vases being played simultaneously; still less that they could have rendered different notes at the same time.

The remark of Mr. Howard that the accompaniment played by the flute is admitted² to have been higher than the voice part can only mean an octave higher. Nothing is clearer from the literary references to music than the absolute aversion of the Greeks from the hearing of two different musical sounds at the same time; the purists objected even to the octave and to an independent passage for flute or lyre when the voice was not singing. It is manifest that the office of the the flute was to play in unison (or at the octave) with the voice when singing was going on, and it is noticeable that the vase-pictures never show two flute players performing at the same time; also Pausanias in his enumeration of the 'personnel' of a Greek chorus,³ uses the singular form αὐλήτης. Miss Schlesinger has shown me a pair of Arab flutes rigidly united, and blown by a single mouthpiece; but their slightly differing lengths give rise to a kind of 'vox humana' or tremulous effect that would never have been tolerated by the Greeks, with their delicate sense of pitch.

But a more serious and more insidious error, which has held the field for twenty years, is the idea that a small hole near the mouthpiece of the instrument called the σέφυξ or 'speaker', enabled the flute player to produce on one or both of the tubes the upper octave above the fundamental notes. This has been asserted or implied by Mr. Howard, and quoted by the writer of the article 'Aulos' in the *Encyclopædia Britannica*, by Mr. Macrum in his notes on Aristoxenus; and I know not how many others. It is simply incorrect.

The source of the error, so far as I can trace it, is in Mr. Howard's admirable study of the 'Aulos or Tibia' in the *Harvard Studies in Classical Philology* (vol. iv. p. 32). It pains me to impugn in any degree the accuracy of so exhaustive and conscientious a work, without which my own investigations could not have been carried far; but Mr. Howard must have been misled on a technical musical point.

In order to make the matter perfectly clear I will quote *verbatim*:—
 'As has been said above, the modern clarinet has near the mouthpiece, a small hole called the 'speaker', which, when open, enables the performer to produce without effort the harmonic tones (*sic*) of the instrument. Although this device is not absolutely necessary, it is of the greatest assistance to the performer, especially in producing the *first harmonics* of the lowest tones.'⁴ (The italics are mine.)

² Based on Aristotle, *Probl.* vii. 12.

³ V. 25, 2.

⁴ It is only fair to Mr. Howard to say that

this has every appearance of being merely a verbal slip; unfortunately it has been largely built on.

Now, every clarinet-player, every clarinet-maker, every organ-builder, every student of acoustical theory knows that a cylindrical tube excited by a reed acts as a stopped organ pipe, and will not produce any but the odd harmonic tones of the fundamental. To make the matter intelligible to everybody, if a certain fingering produces the note E, then the opening of the 'speaker' will change the note to the B twelve degrees of the scale higher. No auxiliary hole or mechanism of any kind in the world, will produce on such a tube with the same fingering the first harmonic, which would in this case be the octave E. The same statement applies with equal force to an oboe mouthpiece if the bore of the instrument is cylindrical (as the normal Greek flutes undoubtedly were).

It therefore follows that the scale performance on a pair of reed-blown pipes, one of which used the 'speaker,' having six holes each, would be as follows:—



In order to supply the missing C, D, E and F, four additional holes would be necessary, making a total of ten holes for a single pipe; and although the Pompeian flutes in the Naples Museum have ten holes, it will be shown later that they did not exceed the octave in compass: even the one with fifteen holes would not have supplied the four additional notes desired.

Having now eliminated from the field of investigation some of the more obvious errors, we are at liberty to examine what is really knowable about the Greek flutes, and the examination will be confined to the normal type of the instrument; though it must never be forgotten that this type varied somewhat during the several centuries with which we have to deal.

First, with regard to the size of the flutes. A careful estimate of the relative length of flute and performer in the vase-pictures gives a probable length of tube varying from 14 to 21 inches. This is confirmed by the dimensions of the extant specimens, and by considerations of playability. The longest of flutes examined have a length of about 22 inches, and the models made from them are beyond the stretch of hand and fingers of any but a tall and well-formed person.

Next as regards the form of the flutes. A careful scrutiny of the vase-pictures will convince us that the typical *αὔλος* consisted of a long cylindrical tube (*βέμβος*) pierced with holes (*τρυπήματα*), and surmounted by two movable pieces, the one nearest the player's mouth (*εὐρύμακρον*) being somewhat cone-like in shape and the intermediate piece (*ὄλμος*) roughly pear-shaped. The representations of flutes are provokingly rough in many cases, but even in the most 'impressionist' of them, where the flutes are indicated simply by two pairs of parallel straight lines issuing from the mouth of the performer, the division into three parts is almost invariably marked by two

cross lines in the correct places.⁴ The Naples Museum flutes, as photographed by Mr. Howard, show the two movable parts most clearly, the *ὑφόλμιον* being seen to consist of a flaring mouthpiece, suitable for the insertion of a reed, and the *δλμος* of a pear-shaped bulb.

There can be no doubt that the reed formed an integral part of the mechanism of the Greek flute, for Pollux, in his enumeration of the parts of the flute⁵ distinctly specifies the reed (*γλῶττα*) in addition to the *δλμος* and *ὑφόλμιον*. Such a reed would not of course be visible in any picture, being covered, except for any part in the mouth of the player, by the *ὑφόλμιον*; and the term used for the whole arrangement (*ζεύγος*) may well be deemed to have a relation to the double nature of the reeds employed, as well as to the twin mouthpieces for the two flutes.

For convenience we will assume that the *γλῶττα* of the earlier flutes was a double reed of the oboe species (the point will be fully dealt with later); and return to the evidence of the vase-pictures. In the earlier vases the two flutes are held at a wide angle and the cheeks of the player are violently distended. It has been suggested that the *φορβεία* was introduced to avoid the necessity of this distention, but the theory is untenable, for in vase-pictures representing trumpeters wearing the *φορβεία*⁶ the inflation of the cheeks is sufficient to satisfy the most exacting.

If we can imagine the *γλῶττα* as completely enclosed by the *ὑφόλμιον* at this period, and if we remember that in the earlier times the flutes did not extend beyond the compass of an octave at most, we can readily conceive that the nature of the twin instruments may have been similar to that of another primitive instrument, a mediæval one called the 'hautbois de Poitou,' the description of which in the *Encyclopædia Britannica*⁷ is so lucid and so apt to the present subject that I am tempted to quote it *verbatim* (I have taken the liberty of inserting the Greek equivalents in brackets).

'The hautbois de Poitou was a primitive oboe with the reed (*γλῶττα*) placed in a bulb (*δλμος*) forming an air-chamber, having a raised slit (*ὑφόλμιον*) at the top, through which the performer breathed-in compressed air; ¹⁰ as the reed could not be controlled by the lips it was impossible to play with expression on the hautbois de Poitou, or to obtain the harmonic octaves.'

I believe that the earlier double flutes were both played with such reed mouthpieces, and the total compass of the pair was a single octave. In the vase-pictures the early flutes have almost invariably three holes each (a pair on vase E 588 in the British Museum shows three on one, and four on the other flute), and as a pure guess I suggest the plan of fingering indicated by the accompanying diagram (p. 93).

The difference in the lowest note of two apparently equal pipes might

⁴ The two movable pieces are beautifully shown in Laboumaie's *Ferres-cordes Antiques*, vol. ii. Pl. E 5.

⁵ l. 4, sec. 76.

⁶ B 590 and B 591 (B.M.).

⁷ Vol. xix. p. 951.

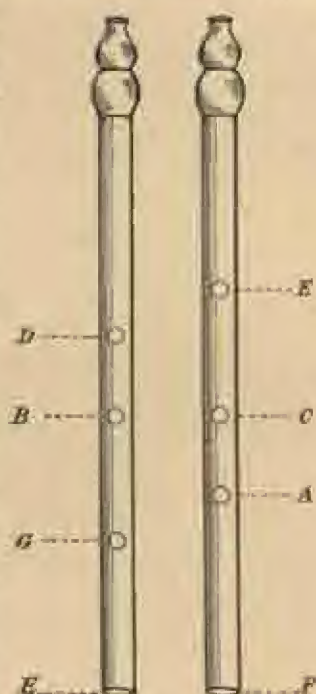
¹⁰ The 'chanter' of the Scottish bagpipes is blown on a similar principle.

be due to the different-sized reeds employed, and in this connection it is interesting to notice that Theophrastus states¹¹ that both *γλῶτται* must be cut from the middle shoot of the same reed, or the pipes will not be in tune. The *γλῶτται* cut from the upper end of the shoot would naturally be less substantial than the other, and might therefore be pushed a little further down the *σάλμος*; but this is wholly a speculation, as also the alternate plan of fingering the notes, which latter suggested itself as a possible explanation of the fact that the two hands seem to be employed in the same region of the two pipes.

At this period the two pipes are always held at a wide angle with each other, and probably the one furthest from the normal position has its *εφ' ὀφθαλμοῖς* entirely outside the mouth of the player, though just touching his lips. At any rate, these guesses have the merit of supplying a possible explanation of the manner in which a pair of flutes excited by double reeds might have been fingered and blown, without attributing to the Greeks any abnormal stretch of hand or power of lip. To the reader unfamiliar with reed instruments it may be explained that the compression of one side of the mouth necessary to produce a note on one flute is practically impossible if the other side of the mouth is occupied.

When the available compass of Greek music was extended beyond the compass of the octave, we should naturally expect some modification in the construction of the flute. As a preliminary chronological observation, it is interesting to note that the period 500-450 B.C. covers both the addition of strings to the kithara, and, according to the vase pictures, an alteration in the holding of the double flutes, which were now held parallel to each other, in such a way as to admit of either flute being fingered by both hands together. A whole crowd of significant dates is included in this period; but some of them must be dealt with later.

The extension of musical composition beyond the limits of the octave would evidently demand changes in the management and fingering of the *αἰλαί* which were, as we have shown, incapable of producing the octave harmonics of the fundamental notes. The first step would undoubtedly be an increase in the number of holes so as to make a whole octave playable on a single flute. It is much to be regretted that the date of Diodorus the Theban who increased the number of holes, according to Pollux,¹² is not to be found, but doubtless it falls within this period.



¹¹ H.P. ix. 11. 7.

¹² l. iv. 79.

Judging from the majority of the flute-tubes found, we should conclude that at this period, at any rate, the number of holes was five or six. With this number of holes, as will be shown, the compass of a single flute could be extended to an octave. This would naturally necessitate the fingering of each flute by both hands, and accordingly we find that about this period (500-450 B.C.) the flutes are represented as held parallel to one another, so that the two hands could manipulate either *one* or the other. But we are still no whit nearer to the solution of the fundamental problem of the Greek double flutes: how to produce two octaves with two flutes of equal length and practically equal hole-distances; if both were cylindrical and excited by reeds. When we face this problem honestly, and give it up as insoluble, we are on the highway to a satisfactory conclusion. The second pipe could not have been blown on the reed-principle.

The only alternative principle of blowing is that of the flageolet, flute, or flue organ-pipe (all of which are identical in excitation, however much external appearances may differ). Although this principle is the same as that of the ordinary penny whistle, I hardly feel inclined to apologise in this paper for a detailed explanation of it.



The breath of the player (P) enters the mouthpiece (A) and is constricted into a flat thin stream (B). As this strikes the knife-edge (C) it is cut into two parts. The first and larger part (Q) issues into the open air. The other smaller part (R) tries to enter the tube (D), but is resisted by the inert mass of air therein contained, through which, however, it sends a pulse of compression. Having performed this work, and lost its force, it (R) is now dragged out into the open air by friction with the moving stream of the larger portion (Q) of the air. Its removal causes a pulse of rarefaction in the air contained in the tube, and these two pulses together constitute a complete vibration of the air in the tube. These vibrations, occurring many times in a second, produce the musical tone of the tube; and it is manifest that the longer the tube the more time the pulses will take to traverse its length, and therefore the fewer the number of vibrations per second, and the lower the note produced. If the edge is not properly placed in relation to the air stream, too much or too little air tries to enter the tube, and the pipe does not 'speak.' The main object of this explanation is to make perfectly clear that the breath of the performer does not enter the tube of the instrument but passes out through the slit into the open air (as anyone can convince himself if he plays a note on a penny whistle having first filled his mouth with smoke). The importance of this point will be seen later in connexion with an illuminative passage of Pollux.

My attention was first drawn to this point by investigation of the possible way of blowing the Castellani bronze flutes in the British Museum. The identical nature of the moulding at the embouchure proclaims them a pair of double flutes, but they are closed at the end nearest the mouth of the performer, and it therefore seems impossible that they can have been held at an oblique angle and played like a modern flute, especially as both hands have to be employed on each instrument. After much speculation as to any possible way of applying a reed mouthpiece to the embouchure, it occurred to me that they might have been blown on the principle of the flue organ pipe, and that it was worth while to try to construct an experimental instrument on such principle. Accordingly a section of bamboo garden cane was pierced with holes so that it would play as an ordinary modern flute. The section between the embouchure and the closed end was then slightly cut down so as to form a flat surface a little lower than the plane of the fingering holes. Above this was lashed by means of waxed thread a piece of soft metal tubing, squeezed almost flat at the end further from the mouth of the player. The flattened end of the tubing was so adjusted that the stream of air issuing from it struck the upper edge of the embouchure, and the instrument emitted its notes as if blown in the ordinary manner. A sketch of the experimental instrument is appended—



A—Metal tubing. B—Flattened end of A. C—Sharpened edge at embouchure.
F—Body of flute. L—Lashing of waxed thread.

It will be curious later to see how closely this purely hypothetical construction resembles the plan of the actual *αὔρηξ μονοκύβητος*. For I am in a position to assert, and, I hope, to prove that at any rate from 400 to 350 B.C. the double flutes (*ἰσοὶ αἰδοί*) were of practically equal length but of different bore, the left-hand thinner one being blown with a double reed like that of an oboe, and the right-hand thicker one being played on the flageolet or *αὔρηξ* principle. The latter, of course, produced notes an octave higher than the equal lengths of the other pipe.

The first step in the proof comes from an actual model of the Castellani flutes in the British Museum. These two flutes are made of bronze, the 'Perfect' (so christened because its upper end is undamaged) having six holes, and the 'Imperfect' five. By the kindness of the Keeper of Greek and Roman Antiquities I was enabled to make accurate measurements of these, tracing the outlines of the holes on paper laid over the instruments themselves. A pair of metal flageolets was obtained and cut down to the requisite lengths; the existing holes were covered over, and new ones bored in accordance with the measurements.

The 'Perfect' model was spoiled, but the 'Imperfect' gave what

appeared to be portions of the Dorian scale: but neither cross-fingering nor calculation of lengths gave any prospect of the production of the fifth note of the scale (B). However, when the upper octave was tried by overblowing and suitable cross-fingering, a complete Dorian scale was produced.

A table of measurements and a diagram of fingering are appended; but as others will follow, it seems desirable to explain the plan of lettering adopted for all.



A, the embouchure; B, C, D, etc., the upper fingering-holes; E, the under thumb-hole when existent; G, the open end.

I have since found out that Mr. Howard gave very careful measurements of these and other flutes, and his figures reduced to the same plan of measurement are given parallel with my own: the slight discrepancies are mainly due to the fact that he measured to edges of holes, and I to centres. In the fingering diagrams the closed holes are shown by black dots, the open ones by blank circles.

IMPERFECT BRONZE FLUTE.

DISTANCE IN IN.			DIAMETER		FINGERING FOR NOTES:—							
J. C.	Height.	Hole	in mm.		E	F	G	A	B	C	D	E
AD	5.75	5.3	1	19	●	●	●	●	●	○	○	●
AC	12.25	12.28	2	9	●	●	●	●	●	●	●	●
AD	17.50	17.55	3	8	●	●	●	○	●	●	●	○
AE	20.4	20.1	4	9	●	●	○	○	●	●	○	●
AF	23.3	23.25	5	7	●	○	○	○	●	●	●	●
AO	25	25.45	Base	15								

The notes are a whole tone lower than our modern pitch; but as that is a semitone above the pitch of Handel's time, no impropriety has been felt in describing as E a note of the same pitch as our modern D.

The immediate point in connexion with this flute is that no single or double reed could possibly produce the E and the B with the same fingering, and as no other fingering will produce the B, it must have been blown on the *σφρυγί* plan.

Our present problem is to reconcile this deduction with the obvious fact that the *γλῶττα* or reed is an integral part of the mechanism of all *αὐλαί*, as is shown by many literary references. We gather from Theophrastus¹⁷

¹⁷ *Hist. Plant.* iv. 11.

that the *γλῶττα* was made from a section of a reed, which included one of the joints. The most suitable part of the reed was the middle shoot; the under joint produced the *γλῶττα* for the left-hand pipe, and the one further from the root the right-hand one. After being submitted to continual pressure to flatten the open end, the edges of this end were pared (for the older flutes) to a great degree of thinness, and thus would be produced a reed similar to that of the modern oboe. This reed was inserted into the *ὀφάλαμος* with the *στόμα* or sharpened end projecting into the mouth of the player, and the playing was precisely like that of a modern oboe. If the preceding explanation is not sufficiently clear for readers not familiar with wood instruments, the following diagram may make it more intelligible:—



A, section of reed, cut off at a joint, J.

B, same section flattened and pared at open end to produce reed, and a small hole U pierced through joint.

C, ὀφάλαμος, into which the *γλῶττα* B was inserted, and held rigid.

D, ὄλαμος, air-chamber by which the vibrations excited by the reed were controlled.

When the compass of the flute was extended beyond the octave, and the right-hand pipe became a *σύριγξ*, a new method of cutting and arranging the *γλῶττα* was adopted. The section of the reed was cut and partially flattened as before, but instead of being pared to two knife-edges, it was cut off at a rather obtuse angle, so as to form a narrow flat wind-channel. This *γλῶττα* was inserted in the *ὀφάλαμος* in a direction opposite to the old one, i.e. the *στόμα* was furthest from the lips of the performer and adjacent to the *ὄλαμος*. A sloping channel was cut in the upper part of the *ὄλαμος*, sharpened to a knife-edge at the portion opposite to the *στόμα* of the *γλῶττα*, with a small open air-space between, and we have an arrangement exactly similar to a flageolet or flut organ-pipe. As this arrangement is so very important in the realisation of Greek flute-playing, a diagram both in section and in plan is appended (p. 98).

If the reader unfamiliar with musical theory will refer back to the earlier portion of the paper, he will at once see how perfectly the definition of Pollux¹⁴ fits the foregoing:—*Ἐπὶ δὲ σύριγγος εἰπον ἄν. παράγειν ἐπ' αὐτῆς τὸ πνεῦμα διὰ τοῦ στόματος, καὶ παραφέρειν, καὶ διασπείρειν τὸ πνεῦμα.* 'In the case of the syrinx, you would use the expressions: to lead aside the breath through the mouth (*stoma*, of the *glotta*), to turn it in a contrary direction, and to squander the breath.'

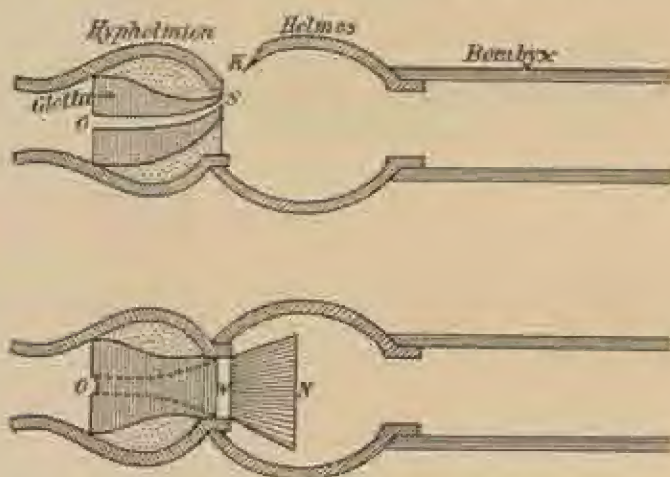
The critical reader may by this time have begun to feel that there is too much hypothesis about the foregoing, but the following long and important passage from Theophrastus seems to me to give sufficient support for all the statements and assumptions made¹⁵:—*τὴν δὲ τομὴν ὁραίας εἶναι*

¹⁴ i.e. 9, 49.

¹⁵ R. P. II, 24, 4.

πρὸ Ἀντιγονίδου μὲν ἦν αἱ ἡλόων ἀπλάστως ἐπ' ἀρκτοῦρον Βοηόρομιόντος
 μηνός· τὸν γὰρ οὕτω τμηθέντα σφυροῖς μὲν ἔτεσι ἕσπερον γίνεσθαι χρήσιμον
 καὶ προκαταυλήσεως δεῖσθαι πολλῆς, συμμίειν δὲ τὸ στόμα τῶν γλωττῶν,
 ὃ πρὸς τὴν διατυρίαν εἶναι χρήσιμον. ἔπει δὲ εἰς τὴν πλάσιν μετέβησαν καὶ
 ἡ τομὴ μετεκινήθη· τέμνουσι γὰρ ὅθ' ἔτι τοῦ Σκιρροφοριῶνος καὶ Ἑκα-
 τομβαιῶνος ὥσπερ πρὸ τροπῶν μικρόν ἢ ὑπὸ τροπᾶς, γίνεσθαι δὲ φασὶ
 τρίτον τε χρήσιμον καὶ καταυλήσεως βραχείας δεῖσθαι καὶ κατασπύσματα
 τὰς γλωττὰς ἰσχυρῶς· τοῦτο δὲ ἀναγκαῖον τοῖς μετὰ πλάσματος αἰλοῦσι.

The suggested meaning of this (with expansions and explanations in brackets) is:— Before the time of Antigonidas, when they used to play the flute in the natural manner (*ἀπλάστως*) that is with the *γλωττα* in its original position) the cutting (of the reeds) was seasonable about mid-September (when thoroughly ripened). For (the reed) cut in this manner



VERTICAL AND HORIZONTAL SECTIONS OF SYRINX.

O, mouth of γλωττα. S, stop or flattened wind channel. K, hollow edge of flange.
 W, open wind space. N, cut down portion of flange.

becomes useful after an interval (for maturing) of several years and needs much preliminary blowing (to determine the amount of paring necessary for best tone of reed). And the mouth (στόμα) of the reed (γλωττα) closes up (the two edges shrivel up and close together) which is useful for the piercing tone (of the oboe character). This gives a fairly clear idea of the original αἰλός and its method of blowing). But when they changed into the artificial method (of blowing: i.e. the syrinx principle just described and illustrated) the time of cutting also was moved. For now they cut (the plants) in the months of June, July, or August, about or a little before the summer solstice (while still full of sap, and therefore less patient of paring). And they say it (the reed) becomes useful in three years (needs less time to mature) and needs little experimental blowing, and the opening of the γλωττα retains its shape (remains constant): a matter of supreme importance in the 'voicing'

of a flageolet-principle pipe, and this is necessary to those who play with the artificial method.

Πρό Ἀντιγενίδου supplies us with a most useful date. Antigenidas lived in the time of Alexander 356-323 B.C. and was an innovator.¹⁰ Presumably he introduced the plan of having both pipes played in the *σόρυγξ* method (μετὰ πλάσματος; so that he used the *σύριγγες τέλειαί* of Pollux' list of instruments.¹¹ But we have evidence that the syrinx right-hand pipe was in use both before and after. Midas of Agrigentum in 496 broke his *ζεύγη*, but won the competition by playing *μόνοις τοῖς καλῶσαιν τρόπῳ σύριγγος*,¹² which can only mean in reality that he used the syrinx pipe for the double octave, as can be done by overblowing (blowing across the edges of the pipes themselves is unthinkable). Ion of Chios (died 421) refers to the *μέγαδης αἰλός*,¹³ which must have been a flute that, unlike the primitive αἰλός, would play the upper octave. Aristotle refers to the syrinx pipe (*κὴν κυττασπίαν τῶν σύριγγας*),¹⁴ as also Aristoxenus (*κατασπασθείσης γὰρ τῆς σύριγγος*);¹⁵ while in a succeeding age Plutarch uses the expression *τῆς σόρυγγος ἀνασπασμένης*,¹⁶ which implies a return to the older method of playing (*ἀπλάσταν*).

This passage of Plutarch's is well worth quoting *in extenso*, as it gives a key both to the construction of the flutes, and the manner in which they were played:—*διὰ τί τῶν ἰσων αἰλῶν ἡ στενωτέρος βαρύτερος φθέγγεται καὶ διὰ τί τῆς σύριγγος ἀνασπασμένης, πᾶσι ὁξύνεται τοῖς φθόγγοις, κλειομένης δὲ πάλιν βαρύνει.* 'Why does the thinner of the equal flutes sound deeper? And why when the syrinx hole [in the *φορβεία*] is uncovered, do all the sounds become sharper [by an octave], and when it is closed again they get deeper?'

The thinner tube being the oboe-blown one could not break into the harmonic octave, while the syrinx-blown one, if of equal thinness, would have been almost certain to do so. A similar relation of thickness exists between the flute and the oboe of to-day. The manner of playing is easily understood. The mouthpieces of the two flutes were inserted in the two holes of the *φορβεία*; the stoma of the oboe-reed entered the player's mouth, but the *ὑφολμιον* of the syrinx pipe fitted its hole, which was closed at its inner end by a movable flap, which could be shifted (*κατασπᾶν* or *ἀνασπᾶν*) by the tongue of the performer. When the flap was closed, no air could escape into the syrinx pipe, and the lips of the player were quite free to exert the necessary pressure on the oboe-reed. When the flap was moved aside, the syrinx pipe would speak without any lip pressure, and the oboe reed, no longer compressed by the lips would cease to give any sound.

I should like to have traced Mr. Howard's source for his view of the syrinx, but unfortunately the reference he gives cannot be found in England. From his words I guess that he rendered a passage to the effect that the syrinx *was* a hole near the mouth of the player; if it read that the syrinx *had* a hole near the mouth of the player, it would harmonise with the foregoing passage and others omitted here.

¹⁰ *Soldier*, 231. ¹¹ *iv*, 38, 11, Sabus's reading. ¹² Schol. to Pindar, *Pyth.* 21, 1. ¹³ *Arbuthnot*, 116, 22. ¹⁴ *De Mel.* 7, 304a. ¹⁵ *Harmon.* 1, 21. ¹⁶ *Ion* *passim* *moet*, 1089a.

The two flutes were probably connected by metal bands, traces of which have been found by Mr. Howard, both on the Pompeian and the Castellani flutes.

The most valuable evidence afforded by the flutes is, however, with regard to pitch and scales. Without going into tedious details, it is necessary to point out that actual measurements of existing remains are not an absolutely safe guide. The length of the *ἄλυσος*, and the exact point at which the oboe reed began to vibrate are matters of fundamental importance. All Mr. Howard's results are vitiated by the fact that he added a mouthpiece some seven or more centimetres in length, thus altering both pitch and relationship of notes emitted. In the following details the actual length has been increased (except in the Castellani flutes, where it was not necessary, the embouchure being exactly known) by a small amount experimentally determined after many failures. The assumption has been made that if the model constructed played a recognisable scale, that was the scale played by the original instrument. It seems hard to imagine it could have been anything else.

THE 'PERFECT' BRONZE FLUTE.

The original model having been spoiled, a bamboo garden cane was pierced according to the measurements, and bored with a flute embouchure. This gave a Dorian scale in the lower octave (i.e. without overblowing); but it was rather flat in comparison with the 'Imperfect' flageolet. Accordingly another metal flageolet was procured, and accurately bored by my friend Mr. Kirchenwitz, an expert in metal work; the diameters of the holes being diminished by $\frac{1}{16}$ of an inch, to allow for the reverse taper of the tube. A just Dorian scale was then playable, exactly an octave below the 'Imperfect' one.

	DISTANCE IN CM.		FINGERING FOR NOTES:—							
	J. C.	Howard	B	F	D	A	B	G	D	E
AB	1.5	3.2	•	•	•	•	•	•	•	•
AT	2.5	5.1	•	•	•	•	•	•	○	•
AC	10	10.75	•	•	•	•	○	○	•	•
AD	17.5	17.3	•	•	•	○	•	○	○	•
AE	20.7	21.3	•	•	○	○	○	•	•	•
AF	33	33.5	•	○	○	○	○	○	○	•
AG	34.5	34.5								

The next point of attack was the Elgin flutes in the British Museum, which are made of sycamore wood, are not a pair, and were probably found in a tomb near Athens. These will be here referred to as the 'Straight Sycamore' and the 'Curved Sycamore.'

The cane for the 'Straight Sycamore' was pierced side by side with the instrument, but many failures were made before discovering the exact allowance to make for the reed. Finally the model played a Lydian dorian

scale, and its nominal C was a fourth lower than the nominal E of the Dorian flutes (as theory demands).

STRAIGHT SYCAMORE

	DISTANCE IN CM.		FINGERING FOR NOTES:—							
	J. C.	Howard.	C	D	E	F	G	A	B	C
AH	9.7	8.2	•	•	•	•	•	•	○	○
AU	19	10.8	•	•	•	•	•	○	○	○
AV	15	14.4	•	•	•	•	○	•	•	•
AD	19.4	17.5	•	•	•	○	•	•	•	•
AE	31.8	20.7	•	•	○	•	•	○	○	•
AF	25.8	24.8	•	○	•	•	•	○	○	•
AO	32.5	31.2								

The Curved Sycamore, on account of its fragility and shape, was not suitable for my methods of measurement; but, having become aware of Mr. Howard's measurements and their close relation to my figures, it seemed worth while to make a model from his published details, adding 1.3 cm. for the mouthpiece as in the former case. A dulciana organ pipe of the narrowest obtainable gauge was procured and the holes duly bored. It was then found that all the notes from D up to B were quite in tune with each other, but the low C was too sharp, and the upper C was not obtainable by any fingering. The addition of a sliding cant-board extension to the lower end of the pipe enabled me to determine the correct length for the fundamental C, and the upper C was then quite obtainable by the ordinary fingering for the modern flute. It therefore seems likely that the instrument originally had a detachable bell, such as clarinets and oboes now have, and such as is shown in some vase-pictures. As the fingering is exactly that of a modern flute, it is unnecessary to give it.

CURVED SYCAMORE.

	DISTANCE IN CM.		Note.
	Adjusted.	Howard.	
AB	14.1	12.8	B
AD	17.5	16.2	A
AC	20.8	19.3	G
AD	24.1	22.8	F
AE	27.8	24.8	E
AF	32.8	31.5	D
AO	41.5	35.9	C

It is, perhaps, hardly necessary to say that the actual pitch was considerably lower than that of the 'Straight Sycamore.'

Further confirmatory experiments must be compressed into brief space, though valuable additional results are suggested by some of them. The next objects of attention were the four ivory flutes unearthed at Pompeii in 1807, now in the Naples Museum, and measured by Mr. Howard, whose figures are here followed. Those numbered 76891 and 76892 are apparently a pair, or, if not, single members of two identical pairs. Number 76893 has eleven holes: these were bored in a bamboo fitted at the upper end with a bassoon reed. The fingering was exceedingly difficult, on account of the great length of the instrument; indeed, the lowest three holes were quite inaccessible to me, though a larger hand might reach them. The holes not required for a diatonic scale were then plugged with cork, roughly representing the perforated metal bands on the original instrument, which could be turned round as required, either to open or to close the hole. The model then gave for the upper holes six upper notes of the Dorian scale, while the lowest but one (F), which I could not blow, was represented by its third harmonic (C). I have therefore no hesitation in saying that the compass of the flute was a single octave, that the extra holes would probably produce the notes of other scales, and that the E was in tune with the Castellani bronze flutes of the British Museum (the pitch of course being an octave lower). In the appended list of lengths measured and notes produced by blowing, the notes that have not actually been sounded are marked with a query. Notice is especially called to the probable G \sharp which is provided on the instrument: this is of the utmost interest, as it would play a note written in the Phrygian Hymn to Apollo which was not included in any of the *σπάργματα* which have come down to us, though the interpretation of the letter-sign used is quite clear on general principles.

IVORY FLUTE FROM POMPEII (76893)

HOLES	DISTANCE IN IN.	NOTE.
AD	31.4	E
AC	34.9	D
AC	36.9	G \sharp (?)
AD	38.1	C
AE	32.14	B
AF	34.3	B \sharp (?)
AG	38.0	A
AH	32.6	G \sharp (?)
AI	42.0	G
AJ	48.7	F \sharp (?)
AK	43	F 15
AO	49.2	E 15

The consideration of the probable results of the untried holes in this model gave rise to the suspicion that the other holes were required for different scales: harmonical, as it is abundantly evident that the Greeks had no idea of our modern chromatic scale. As the manipulation of an experimental instrument fitted with a double reed is a somewhat perilous matter, it was decided to construct a bamboo model of the Pompeian flute No. 76891, with a flute embouchure, and to fit the holes with movable leather bands in imitation of the metal bands of the original. The model thus constructed tended to confirm the suspicion, but two difficulties detracted from its usefulness. In the first place the extreme length of the instrument made its fingering in a horizontal position quite impossible for the farthest holes; and the leather bands worked loose after being turned two or three times. Still, although unsuitable for demonstration afterward, and too evanescent for systematic record, the notes obtained rendered it extremely likely that the original, which had eleven holes (like No. 76893), would play the Dorian, Phrygian, and Lydian harmonical, and was therefore the Panharmonion referred to by Plato.²⁸

It remained, therefore, to seek a record of a flute with many holes, but of a more manageable size. This was finally found in a flute described by M. Loret²⁴ as belonging to Sir G. Maspero. It is said to have been found in 1888, at Akhmim in Egypt (the ancient Panopolis). It may be objected that this is travelling beyond the bounds of Greek music, but the remarkable similarity to the Castellani flutes of the illustration given, together with the identity with the Pompeian flutes of the number of holes, seems to point to this being a flute of Hellenic origin; if archaeologists decide otherwise it is a strong argument in favour of the Egyptian origin of all Greek music; personally, such a decision would appear to me to conflict with a great mass of other evidence. M. Loret himself says: 'La flûte appartient à M. Maspero sort absolument de l'archaïsme, non seulement par la forme de son embouchure, mais encore par la disposition de ses trous.'

Before going into detail about the performance of this flute, it is interesting to note how closely M. Loret (who has evidently no suspicion as to its correspondence with Greek flutes) describes the *άλυος* and *ἐφέλυος* of the *kyriux*, as previously reconstructed in this article: "Le bec est un fragment de roseau assez épais et d'un diamètre nécessairement supérieur à celui de la flûte. Il mesure 8 cm de longueur. La partie dans laquelle s'introduit l'extrémité de la flûte a un diamètre de 1.3 cm, et est entourée, ainsi que le bout de la flûte qu'elle devait recevoir, d'un enroulement de fil recouvert de peux. Cette embouchure n'est certainement pas à anche (is certainly not a reed). Le roseau est bien trop épais pour avoir servi d'anche, et, d'ailleurs il n'y a été pratiqué aucune ouverture. Il n'y a donc point de languette. L'extrémité est coupée perpendiculairement à l'axe de l'instrument et présente une section transversale de forme presque triangulaire."

²⁰ Αποστόλ. αλ. 10, 370 c. Τα 4; μέλησται
 4 μέλητα καμάρη αλ τῶ τάλ; 4 τὸ πῆτα
 καλκαυοθέτα, καὶ αὐτὴ τὸ κατὰ τὴν μέλη

Человек, который не знает, что такое любовь, не может быть счастливым.

¹⁹ Journal of Democracy, 81th winter, vol. 31, pp. 312, 313.

L'embouchure présente donc la forme de deux troncs de cône ayant leur sommet commun et dont l'un a une base circulaire tandis que l'autre a une base presque triangulaire.

The method of investigation adopted was as follows. As a preliminary a model was bored with the holes which most nearly corresponded with those of the Castellani flutes, which are almost precisely of the same length. This model, as was hoped, gave a fairly correct Dorian scale.²⁰ With this amount of solid ground to stand on, one was encouraged to bore a bamboo with flute embouchure and the complete set of eleven holes according to M. Loret's measurements, here appended.

MASPERO FLUTE.

No.		LENGTH IN CENTIMETERS.
1.	AB	4
2.	AC	6.4
3.	AD	8.4
4.	AE	10.0
5.	AF	12.9
6.	AG	14.1
7.	AH	16.2
8.	AI	18.8
9.	AJ	19.9
10.	AK	20.9
11.	AL	21.7
	AO	23.2

On this model it was possible, by covering the proper holes with wafers (afterwards by stopping them with wooden plugs) to obtain three fingerable arrangements of holes on which could be played the Dorian, Phrygian, and Lydian harmoniai respectively. The final step was to take a metal flageolet, fill up the existing holes, and bore others according to the given measurements; next to cover each hole with a perforated sliding metal band, as was done with the Pompeian flutes, by which a hole might be mechanically stopped or left open. The holes left open to produce the different harmoniai are specified here, as there are two distinct points of interest with regard to them.

HARMONIA	HOLES OPENED						
Dorian . . .	1	2	3	5	7	10	11
Phrygian . .	1	2	3	5	7	8	10
Lydian . . .	1	2	4	6	7	p	

²⁰ It may be mentioned incidentally that no reproduction of any of the flutes gives a true effect unless all the holes are bored.

The first and most obvious fact is that all the holes are needed; and hole nine, which appears to be most awkwardly placed for the right thumb, is only used when ten and eleven are covered by the hands, so that there is no practical difficulty in covering the holes with the fingers for every scale.

The other fact is so illuminating with regard to the feeling of the Greeks for just intonation (the matter in which their pre-eminent delicacy of ear is really displayed) that it deserves a rather more detailed treatment. A glance at the table of measurements will show that the ninth and tenth holes are but a centimetre apart; so close that if both were on the same side of the instrument they could hardly be fingered. Now the uncovering of hole ten produces the second note of the Phrygian harmonia, whereas if we open hole nine instead we get the second note of the Lydian harmonia; and those familiar with the intervals of Greek scales will at once remember that the first step in the Phrygian scale is a *minor* tone, and the first in the Lydian a *major* tone. This one point is conclusive in proving that the Greeks recognised the distinction between the major and minor tone, and therefore could not have used Pythagorean intonation.

This series of experimental reconstructions does not claim to be in any sense exhaustive; there are many other possibilities of producing more notes by cross-fingering, or the partial uncovering of holes; but it is submitted that if the scales herein detailed *can* be played on the models, there is an overwhelming probability that such scales *were* played on the originals.

No flute playing the Phrygian tropes has been seen by the writer, but M. Loret describes a flute in the Turin Museum (No. 12 in catalogue) which gives a Phrygian scale, if the speaking length of the tube be taken about three centimetres less than he gives it: it is impossible to say without seeing the actual instrument whether or not this reduction is justified.

To sum up, it is claimed that these investigations show —

1. That the lowest note of the normal octave of the Dorian tropes, the Harmoniai,²⁰ and the enharmonic genus was about a tone lower than our modern E (continental pitch).

2. That the Dorian, Phrygian, and Lydian tropoi (and by inference the remainder of the fifteen) really had the relative pitches suggested by the notation. The 'Curved Sycamore' hints that there was also a Lydian scale of arbitrarily *low* pitch, possibly the 'Chalarn-Lydian' apparently alluded to by Plato (*Rep.* 399A).

3. That the Harmoniai were actually in existence and in use by the Harmonikoi.

4. That the Greeks used true intonation, and (by inference) neither the Pythagorean theoretical system nor (as a rule at least) the quarter-tone enharmonic.

J. CURTIS.

²⁰ It may be as well to reiterate that the Harmoniai were a set of scales beginning on the same note but with differing intervals, while

the Tropoi are playable on the white notes of a piano beginning on different notes.

A CUP SIGNED BY BRYGOS AT OXFORD

[PLATE IX.]

A COMPLETE drawing is reproduced in Plate IX. of a kylix¹ in the Ashmolean Museum, signed on the handle ΒΡΥΓΟΣ ΕΓΓΕΞΕΝ. Apart from the interest of its signature, the vase is important for its subject, which appears to be rare if not unique. I have, however, been unable to determine with certainty either subject or authorship, and shall content myself with trying to establish a sound basis for further investigation, and suggesting features of probable significance.

The kylix is large, with a comparatively small design in the interior. The chief measurements are: height, 12 cm., diameter, 3½ cm., breadth across handles, 41 cm., diameter of inner circle, 14 cm. The cup is fragmentary, but the existing surface is well preserved, and the black, which is laid on rather thickly in parts, is deep and glossy throughout.

The interior scene has a border of stopped meander in sets of 2, 3, or 4 broken alternately by chequer squares and saltire squares with dots at the ends of the cross-arms. The two scenes on the exterior have no border but a reserved red line above and below. There is a fragmentary palmette design beneath one handle.

The scene in the interior (Plate IX.) is practically complete except for a gap at the bottom of the circle, which, though it leaves the figures intact, possibly deprives us of some clue to the interpretation of the subject. All that is certain is that the two figures are kneeling on some level surface, the horizontal line of which marks off a reserved segment of the circle with depth equal to about a quarter of its diameter. The horizontal border of egg and tongue suggests, though it does not invariably denote, a definite part of the scene, such as an altar.

The attitudes of the figures are clearly and carefully worked out. The left-hand warrior has his back turned to us and looks out sharply to the left, drawing his sword from the sheath; his left knee is raised and bent, and the foot rests on the horizontal line. The right was apparently slightly bent at the knee, and in profile—to judge from the drawing of the muscles of knee

¹ Given by Mr. E. P. Warren of Leven. I saw a small photograph of the interior appeared in an illustration to the Keeper of the Ashmolean Museum for permission to publish the vase. *Oxford Reports of the University Institutions*, 1911, p. 17.

and upper leg; it would naturally fall behind him, i.e. in front of the horizontal line, but whether the weight rests on it or on some object at a lower level, is not clear from the fragmentary state of the drawing.

The position of the right-hand figure amounts practically to a reversed view of the other, except that here the right knee is raised (repeating the line of the other's left) and the left leg is drawn in bold foreshortening with the knee bent back, short of the level, and only half hiding the frontal foot, which continues in an almost vertical line to the ground. The foot rests on the toes—5 small circles overarched by a black line convex to the knee, indicating the sharp bend at the toe-joints.

Both men are bareheaded but wear an elaborate cuirass over the chiton; both draw their swords turning their heads sharply in opposite directions.

Below the horizontal line, at the edge of the break, are two patches of dull brown colour.

The exterior (Plate IX.) is more fragmentary but also more capable of being reconstructed from familiar types.

Side A, Arming: beginning at the signed handle, from left to right. Fragments *a, b, c.* Group of old man leaning on stick and youth putting on his greaves. The rise of the handle-curve on the left of (*a*) indicates the position of the fragment: the knotted stick connects it with fragment (*c*), and the attitude of the stooping youth² on the two fragments determines the position of (*b*) with greave held ready to put on. At the right of frag. (*c*) are two profile feet (to *l*) overlapping considerably. The right and foremost is preserved up to the knee, with a greave; of the left only the beginning of the greave line (relief) is visible, along the edge of the break. A bow, apparently with no string to it, lies horizontally across the foot of this figure. Above, on the right of frag. (*b*) is the frontal body (to the waist) of an armed warrior whose head is turned to the right, i.e. in the opposite direction to that of his feet. With his raised right he holds a spear slantwise over his shoulder; a shield (emblem: bull) hangs on his left arm, and a sword at his side; the crest of his helmet has a long tail-piece hanging down on the left as far as his belt. Projecting into the round of his shield is an angle of drapery, which probably belongs to a figure of the next group.

Fragments *d e* form a larger group or series of which the upper half is mostly broken away. Two profile feet (to *r*) are the only indication of a figure (*s*) on the left. The other figures are, from *l* to *r*: a woman in a long chiton, frontal, with a shield apparently leaning up against her side;³ the warrior to whom it belongs stands next with *l*. foot frontal, wearing greaves. Behind his foot and those of the next figure is one of those small, carefully executed studies of armour for which Brygos and Douris seem to

² Cf. similar figures, on Douris' Vienna cup, *Fourier-Besold*, III. (A), and on the Brygos piece, *Gerhard, Antiquarische Forschungen*, 269-70 (Valerius).

³ Cf. *Palbank, White Attikaia L'epith.*

p. 167, Fig. 39, where a shield leans against the warrior's mantle; against his knee on a *Skambyria*, Boston (6667 Doolidge); against his spear on a *bikytos* in Oxford. Cf. F. H. III. *et alia*.

have had a partiality:¹ a shield lying on the ground and a helmet standing on top of it. The first shield is covered on the convex side with a scale pattern, the second with a chequer pattern—both of which we found conspicuous in the armour of the warriors on *I*. The remaining two figures on frag. (*D*) are drawn from behind and with no incompetent handling of the problems involved. The positions of the feet clearly suggest the uneven distribution of weight in an easy standing posture; the left-hand figure stands on tiptoe. On the right of the last figure is a shield seen mainly on the inside, in three-quarter view. We have still to mention a fragment (*E*) with the back of a warrior wearing corslet, and the end of a helmet-crest showing on the left, which fits in well enough above the first of these two figures.



FIG. 1.—FRAGMENT A.

Under the handle (frag. *F*) palmette and scroll design interrupted by the foot of a running figure belonging to the first group on *B*.

B. Frag. *g* shows the rise of the handle on the left.

The fragments *g*, *i*, together with *h* (which I venture to place here though it is not included in the actual restoration of the vase) form the first group in a *Battle between Greeks and Persians*. A Greek rushes forward from the left, holding out a shield, his

right arm apparently raised from the shoulder to strike. On *h* (Fig. 1) the helmet with long crest and the neat linear drawing of the corslet are stylistically of a piece with the rest of the kylix; and allowing for the loss of a small wedge-shaped flake between the fragments, the curve of the surface no less than the attitude of the figure formed a continuous whole. The curious projection behind the helmet is probably a broad sabre flourished over the left shoulder, after the fashion of the vase, Hartwig, *Meisterschalen* (vi) (Edinburgh) and many other examples. So far as I can judge there seems to be no valid technical ground why the fragment should not be inserted here.

On (*i*)—which should be placed rather nearer to (*g*)—we have part of the Greek's shield, and then immediately the frontal body of a Persian moving to the r. with right arm raised. Part of his decorated leggings appear on the edge of frag. (*g*). On his right is the sleeved arm of a second Persian grasping a sword hilt.

At this point we come to a large gap of about one-third the length of the side: the remaining third together with the signed handle consists

¹ Cp. "Contest for Arms, kylix in B.M., E 40 (*Bild u. Lied*, p. 212, redians Hartwig, *Meisterschalen* (vi), p. 559), and Göttsch, *J. F. Pl.* 240-50; also *Leyden, Fries Prints*, Pl.

XII.; the motive occurs five times in Douglé *Vases grecs* (F.-R. liv.), twice with the shield on end.

of a large fragment (*k*), and a small one above it (*j*), which are obviously contiguous.

On the extreme left of this group is a Greek (drawn in three-quarter back view), who rushes at an opponent on his left with levelled spear. He strides over the outstretched π foot of a wounded man, who probably lay half prostrate, filling the gap between the Persians on the left and the Greeks on the right.⁴

There remains the most interesting group on the exterior of the kylix: a Greek and a Persian in single combat. The figures are strongly contrasted, no less in attitude than in arms and accoutrements. The head of the Persian, with striking profile and wearing a Phrygian cap, is one of the few preserved on the exterior. But the most singular feature is his great oblong wicker shield, which is so far the only known parallel to the one illustrated in *Jahrbuch* 1911, p. 281 (Schröder: *Zu Nikons Gemälden der Marathonschlacht in der Stoa Poikile*).

A few notes as regards the technique.

The drawing is mainly in thick black relief with a sparing use of colour: the face profile, eye, ear, and nostril, the upper edges and lower strokes of the beard, the main lines of armour and drapery, the markings of grooves, generally the ornaments of the shield, the ankle and the marks at the back of the knee \approx are in black relief.

The ends of the hair thin off into dark brown glaze; the minor lines of drapery, the inner markings of the body, and once the interior of a shield, are in brown. We sometimes find the brown musculature in the leg side by side with the black groove-markings.

Red paint is used for the circle of the two warriors in the interior, and for the strings which tie their shoulderpieces in front.

The hair contour is reserved; in one case the hair has a single line of raised dots on its outer edge, a double row against the face, making a sharp angle at the temples.

The subject of the interior scene (*f*) presents an attractive problem. The two warriors fall into none of the regular types or classes of vase-interiors. They are drawn with a scrupulous care for the disposition of their limbs and an eye for significance of attitude; they appear to be the expression of a very definite idea in the mind of the painter.

The interpretation really turns on the meaning we attach to the reserved segment and the line which cuts it off. One is tempted at first sight to assume that it is the top of a wall or fortification on which the two warriors kneel in an attitude of suspicious and watchful defence. Yet we have abundant examples of the use of a reserved segment simply for convenience in the design. Frequently there is a horizontal border of egg-and-tongue pattern. In certain cases it is not clear whether or no the line has a bearing on the scene. On a white cup in the British Museum

⁴ For the figure cf. Berlin *Vasikatalog*, type among the 'Molien' reliefs in the Terra-cotta Room of the British Museum. Overbeck, *Verzeichnisse*, i. xl., and F.-R. xxx. *Hesperia*, etc. It is interesting to find the

(D) the feet of the bull carrying Europa rest on this line. On another fragmentary white vase (Leonhardt *Griech. u. Sicil. Vasenbilder*, Pl. XI 2), where Herakles fights with an Amazon, the sole of the Amazon's extended foot projects downwards across the line.

On a kylix at Leyden, on the other hand (Roulez, *Vases Peints*, p. 1, Pl. II.), a segment marked off by a line with egg-and-tongue border beneath it, clearly represents either an altar, on which the goddess Athena stands, or the basis of her image. It is worth noticing that neither the goddess nor her votary stands actually on the line, but their feet and legs are cut off by it some way below the knee. On the exterior is a very similar group, showing the two ends of the structure—a slab projecting over low perpendicular sides—and at the left a votary standing on the groundline and stooping slightly to lay his offering on the slab before Athena *Σεπεία*. The possibility of an altar is all the more to be considered as it gives the most plausible explanation of the two brown daubs. Also, the egg-and-tongue border is a very common feature of altars on vases.

Nevertheless the assumption by Mr. Bursley (*J.H.S.* 1910, p. 65), that the scene is practically a reproduction of a Kleophradean subject—two warriors fighting at an altar—seems to me premature in the face of (1) so vital a discrepancy as that which he admits, i.e. that they are in one case opponents, and in the other allies; and (2) the stronger *a priori* probability, deduced as it is from the figures themselves. The men appear to have just clambered on to a wall (possibly we are to see the rounded ends of laddershafts in the problematic daubs aforesaid) and crouch in attitudes half aggressive and half defensive, as men would in a position at once so commanding and so exposed. In bold mood one surmises a scene from the Persian War in keeping with the subject of *B* on the exterior. As the Greek attack on the Persian camp after Plataea it would be, in contemporary vase-painting, a unique expression of the patriotic vein. But according to Herodotus (ix, 67-70) the Tegeans and not the Athenians were the first to scale the walls of the Persian camp,—an incident which an Athenian potter would not be anxious to immortalise. Moreover two men with bare heads and no shields, looking out in opposite directions with swords half-drawn, do not suggest the sudden storming of a stronghold after battle so much as some stealthier form of aggression or even watchful defence.

We fall back on a subject familiar in Greek art, the expedition of Odysseus and Diomedes to carry off the Trojan Palladium. True there is no palladium in the drawing nor any hint of its relevance to the scene; nor is there any representation of the subject perfectly analogous to this. The nearest parallel perhaps is a black-figure scene on an amphora, *Arch. Zeit.* 1848, Pl. 17 2, where two warriors kneel side by side, in full armour, holding spears, and their heads are turned in opposite directions.

* Even if we suppose them to be at bay on the altar, the absence of any assailant would make the effect abundantly *dis*concerted, say,

with any *Diomedes*! while the representation here is far too purposeful and comprehensive to be a mere excerpt from a completed scene.

Our painter, following the tradition, has been at some pains to distinguish the two heroes by many small traits (*e.g.* hair, sheaths, corselets, etc.); he has decided for himself how much it would be practical for night-raiders to carry in the way of arms and impedimenta. The result is a certain directness and vitality in the conception, reminding one of the famous *Sisyas* vase in Berlin (F.R. cxviii.) and more remotely of the *Penthesilea* motive conceived at its greatest moment for the first time in the Munich cup.

We have still to take up the challenge of the signature. It must be allowed in the first place that the work of the painter is not necessarily confined to pieces signed by him—still less to those with the Firm-mark of the potter; and conversely that the potter's signature does not imply the work of one painter only.

In the *Wiener Vasenkatalog* are published (C-Pl. 7, 2 a-f) the fragments of a vase with *BPV* [*Ἰσὺς ἑκμύνητος* or *ἑκμύνης*] in a stiff archaic style

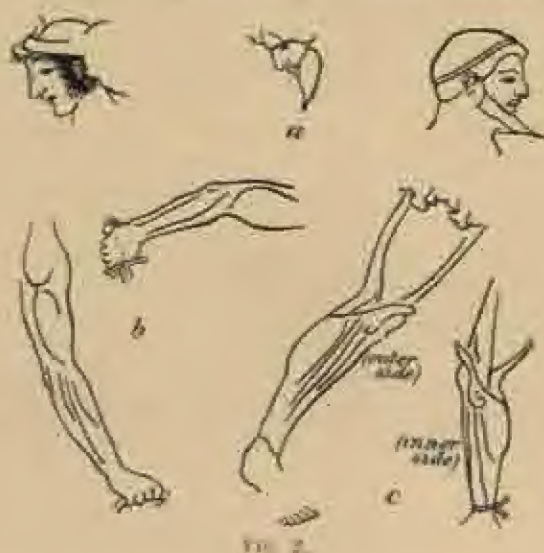


FIG. 2.

totally unlike that of the great *Hesperis* (Louvre) and *Iris* (B.M.) *Brygos* *ἑκμύνης* cups. To the anonymous master of these, whom for convenience we call *Brygos*, Hartwig, following others, assigns a great quantity of work ranging in type and quality from the most advanced to the most primitive of the eight signed pieces in his list.

It is hard to believe the Frankfurt kylix (best reproduction *Mon. d. Inst.* 1850 *ten. G.*) to be even an early work by the same hand; it is however to this that our cup bears, superficially, at least, a decided resemblance, while it differs from the maturer work in several characteristic and peculiar details.

In the style we associate with *Brygos* the nostril is rendered as in (a) in Fig. 2, the muscles of the leg (inner or outer side indiscriminately), and the muscles of the upper leg as in (c); the muscles of the arm, as in (b). In

the Oxford cup the nostril is thicker and blacker, of a different shape and differently placed. The muscles of the inner and outer sides of the leg are regularly distinguished; in the lower arm there is a curious short stroke joining the ends of two parallel lines running down the arm. As we saw, the use of colour is very sparing, in contrast to the lively colouring of Brygan designs.

The features (with the notable exception of the long narrow Brygan eye) appear to be blunter, yet without the engaging sameness of the Brygan snubnose, and we miss his fine spirited limb-contour. The scheme of the interior (roughly, two uprights on a horizontal line) is as unlike the proper Brygan schemes as is the pseudo-Brygan piece (Murray, *Vase Designs in the British Museum*, No. 48).

In the border, the saltire squares with dots at the ends of the cross strike one as un-Brygan; but they occur in the Frankfurt vase (above), which has further in common with ours a certain stiff serial arrangement of the figures on one side of the exterior, and a liberal use of scale and chequer patterns for armour. The third figure on the left on the 'Triptolemus' side, a man standing with head to r., body frontal, and feet to l., is a curious analogy to the fragmentary figure of a warrior in the first group of the Arming Scene.

In both—as contrasted with the Würzburg *scopus* (F.-R. 56)—the outer line of the reserved hair-contour is smooth and does not follow the undulating line of the hair.

A broken kylix in the British Museum (E 73), assigned by Hauser and Beazley to Kleophrades, has an original presentation of the Peleus and Thetis motive in the centre, surrounded by a zone with Nereus and sea-nymphs, with similar blackness of line; three feet on one side (*B*) are drawn in foreshortening, one leg from behind with black knee-marks Σ ; the leg of a kneeling figure has the muscles marked as in *c*; and in the lower part of Nereus' arm the two almost parallel brown lines are apparently joined by a short stroke at the top exactly as in the Oxford interior. The blunt drawing of nose and lips, the drawing of the ear, the occurrence of scale pattern in the interior are further points in common. The drapery edge however and the pattern of the border (with alternate chequer-squares) are totally different, and belong rather to Douris' style. This coincidence of certain details is significant in view of the correspondence (pointed out by Mr. Beazley, *J.H.S.* 1910, p. 64) of our vase with another Kleophradean piece, as yet unpublished, in Athens.

Quite apart from the somewhat doubtful connexion of the interiors, discussed above, there is a striking resemblance between two scenes from the exterior representing arming. The figures in both are nearly all seen from behind and the foreshortenings of the feet are the same. Mr. Beazley concludes from the partiality of Kleophrades for back-views and foreshortenings that he, rather than Brygos, was the inventor of this scene.

Again, in the famous *Hioupersis* hydria of Kleophrades, the figure to the right of the fallen man, a young warrior (attacked by a woman with a pistle, not as Furtwängler says as he is in the act of spoiling the corpse, but as he

falls on one knee, already wounded, as the broken eye indicates) strongly recalls the attitude of the right-hand of our two warriors.¹ The kneeling figure with one leg frontal and foreshortened is by no means a common one in several Red-figure, although just as in Kleophrades, we do find several examples of it. The use of the figure here is perhaps too deliberate and independent to be accounted for merely by 'transference of type' (cp. Zahn, *Ath. Mitth.* 1898, p. 61 n.) but may nevertheless have been suggested by the Kleophradean motive. Nowhere else in Brygos' work is the influence of Kleophrades so apparent, and it is partly for this reason that I am inclined to separate the Oxford vase from the main group of Brygos' pieces; partly also on the ground that the divergences from the usual forms are hardly attributable to a variation of manner, and certainly not to rapid or sketchy performance, of which we have, in the *Maenads* and *Silens* (Hart, *Cab. des Méd.*, MS. xxxii.) an example far more in Brygos' temper. Compared with the Frankfurt vase it is too able and masterly to be accounted for, with that, as an early work; and should probably be assigned to some advanced member of his school, to whom also we might perhaps attribute the Frankfurt vase as a youthful piece.

M. A. B. HERFORD.

¹ I know of no other figure whose the knee, as here, does not rest on the ground, and the frontal foot continues the line of the upper leg downwards. Possibly it is an attempt to draw a squatting figure with the lower leg bent

sharply back at the knee, and supporting the upper leg and thigh. The loop-shaped inner smearing would then indicate the bulging muscles of such an attitude.

NOTES ON A GROUP OF MEDICAL AND SURGICAL INSTRUMENTS FOUND NEAR KOLOPHON.

[PLATES X-XII.]

THIS set of instruments and the large beaker were found about three years ago near the site of Kolophon in Ionia.¹ The objects are thirty-seven in number. With two exceptions all are of bronze. The blades of the knives were originally of steel, but this metal has in each case been almost destroyed by oxidation. The date is uncertain—it may have been before the Christian era but is more probably the first or second century A.D. The glass beaker belongs to a type which is said to occur so late as the fourth century.



FIG. 1.—SURGICAL KNIVES.

chaven by an iron razor or iron scissors.² I mention this superstition as possibly explaining a peculiarity to be observed in surgeons' knives; it will

1. **Knives.**—In ancient times knives were either of stone or of bronze. The superstitious fear of iron lingered even into the Christian era. It was unlawful to introduce an iron implement into any Greek temple.³ Bronze on the other hand had a special purifying virtue.⁴ In Rome it is well known that no iron was allowed to be used in the construction or repair of the Subleian bridge. No Roman priest might be

¹ They were formerly in the possession of the late Alfred O. Van Lennep, Dutch Vice-Consul at Smyrna, whose life-long connection with the large estate owned by his family near Kolophon gave him exceptional knowledge as to finds made in that district. He told me that he knew these objects to have been unearthed all together, not long before the spring of 1912, at some spot in that neighbourhood;

anatomy where this was he did not know. His scrupulous accuracy makes this, in my opinion, a satisfactory certificate of origin. The set belongs to the Johns Hopkins University in Baltimore, U.S.A. [Note by W. H. BURNETT.]

² Plutarch *Prosepe per. eispud.* xvi. 7.

³ Scholiast on Theocritus II. 33.

⁴ Macrobius, *Sat.* v. 13.

be remembered that surgical treatment was related to the worship and ritual of Asklepios.

The illustration in the text (Fig. 1) shows the remains of two knives, *A* and *B* (copied by permission from the excellent treatise on Greek and Roman surgical instruments by the late Dr. Milne). The steel blades here remain, though much altered in shape by rust. *C* and *D* are restorations shewing two out of the many types of surgical knife. It will be noticed in these four cases that the handle consists of a squared central part, beyond which, at the part remote from the steel blade, a leaf-like projection extends. This is in fact a sort of bronze blade, and the two edges are in some cases fairly sharp. Whether this part of the instrument was retained for use as a sort of blunt dissector, or whether it is a ceremonial survival of the ancient bronze cutting blade, may be uncertain. I suggest the latter explanation. For the operator it was not a comfortable or convenient handle. *C* represents a double-edged scalpel or *φλεβοτόμος* or *καταύς*. *D* is the convex single-edged scalpel or *στεφουρίδι*.

This collection includes six knives of the above type (Plate X, Nos. 1 to 6). In 5, which is shewn in profile, the groove is well seen in which the base of the steel knife was secured. Nos. 7 and 8 are rounded handles, and 9 is another form of the same, formerly holding some steel instrument, perhaps a knife-blade. Probably among these knives may have existed the *σαρευίδιον*, a long slim blade, and the shorter and stronger *λιθοτόμος*. These objects vary from 7.5 cm. to 12.5 cm. in length.

II. **Forceps.**—No. 10 is a large and beautifully made instrument 19.5 cm. long. The handle is in part formed of two dolphins. This may be an example of the *πολυποδέκτης* or polypus forceps. The 'bite' of the teeth is strong and close. Nos. 11 and 12 are two pairs of strong forceps possibly *τριχολαβίς* or epilation pincers (14.5 cm. in length) but applicable for many purposes. In each case the one prong has a semicircular prominence which accurately fits a corresponding hollow in its fellow. No. 13 is a lighter pair one prong of which has been lost; 14.2 cm. in length. No. 14 is a strong *ὀστέαγμα* or bone forceps, with artistically modelled handles. The blades present teeth which grip firmly. Length 22 cm. This type of forceps was often needed for the extraction of arrow and lance heads.

III. **Elevator.**—No. 15 appears to be a powerful elevator or lever, the *vectis* of the Romans, for raising depressed bone. One end has been broken and is lost. Length 15.0 cm. Complete specimen shown in Gwilt, *Greek-Latin Chirurg.* i. Pl. II. n. 41.

IV. **Tenacula.**—No. 16 is a beautiful example of a double *ἀγκίστρον* or sharp hook. The handle is formed of turned bronze. The two limbs twist round one another spirally. Size 16.5 cm. Nos. 17 and 18 are two single sharp hooks both decorated. Size 16.3 cm. No. 19 is an example of *τυφλάγκιστρον*, the blunt hook. Size 11.6 cm.

V. **Catheters.**—The *kathēter* or *pistilus urinae* of Latin writers.

No. 20 in Plate XI is an excellent example of a full sized male catheter, having an aperture or eye at its lower point and a projecting edge at the upper end as in modern instruments. It has the usual S-shaped curve commonly adopted in Graeco-Roman times. Length 32.2 cm., breadth 6 mm. No. 21 is a portion of a smaller catheter, 16.5 cm. in length, 3 mm. broad.

VI. **Bronze Box.**—With lid, for small instruments or medicaments, 15 cm. by 2.2 cm. (No. 22).

VII. **Drill-Bow** (*†*).—The instrument numbered 23 has been somewhat difficult to explain. In all probability it is a folding drill-bow for driving a trophina. No. 23A in Fig. 2 shows the instrument opened out and the cord attached to and stretched between the two apertures at *a* and *b*. The total length of the bow is 39 cm. and the length of the cord 26 cm. Hippocrates,⁵ Celsus,⁶ Galen⁷ and other writers speak of the use of this instrument in injuries and diseases of the skull and larger bones. The drill itself, the *πύλος* of Hippocrates and *τροφίνα* of later writers, a straight steel or bronze rod, having a rotating handle at its upper end, and a sharp steel auger or a circular saw at the lower, had a turn of the cord passed tightly round it. The operator holding the rotating handle placed the auger or saw on the bone to be perforated and by a rapid to and fro movement of the drill-bow caused a quick revolution of the auger and speedy perforation of the bone. When a circular piece of bone was to be removed a short steel tube with teeth on its lower edge was used in place of the auger; this was termed *χορτοκῆς*. The drill-bow is similar to the tool used by carpenters in



FIG. 2.—DRILL-BOWS. [Scale 1.]

ancient and modern times. Examples of the special form used by Greek and

⁵ Hipp. *περὶ ἀφρ. ὑπερ.* [Van der Linden], cxviii.

⁶ Celsus, viii, 3.

⁷ Galen (Köln), x, 446.

Roman surgeons are rare. The British Museum possesses one, though its nature and purpose were never ascertained until the discovery of the specimen here described.

The example from the British Museum is shown in 23B (Fig. 2). The hinged piece *c* has been broken off near the joint, hence it was difficult to identify until a complete specimen could be used for comparison. We are indebted to Mr. A. H. Smith for permission to photograph the Museum specimen: he first noted its identity with our No. 23.

VIII. Scoop or Curette.—Specimen No. 24 is of much interest. It is a double scoop or *xyathloxos* measuring 19.5 cm. in length. The one scoop is toothed at its extremity, the other is smooth. On cross section the hollow of each scoop is seen to be formed not by a curve but by five planes meeting one another at equal obtuse angles. The two scoops, each 9.75 cm. in length, are joined together by a cross piece 1.5 cm. in length at right angles. This arrangement permits a strong hand-grip on the instrument. Gynaecologists whom I have consulted tell me this double scoop may be intended for, and could be used as a uterine curette.

Hippocrates¹ speaks of such an instrument (*ξύστρον*) being used for disease of the os uteri.

IX. Probes.—Nos. 25 and 26 are good examples of the probe *μήλη* or *specillum*. No. 25 is exactly like a probe of to-day; it has the two olivary thickenings at the ends and is what Galen would have called *δυσόρημος μήλη*²; length 15.7 cm. No. 26 has no olivary enlargement at either end, but presents a small round flat disc about 5 mm. in diameter at one extremity; length 17.2 cm.

X. Caustery.—No. 27 is probably a bronze caustery or *καυτήριον*. Its length is 16.8 cm. and the breadth across the part to be heated is 3 cm. Similar specimens of caustery are shown by Gwilt, I Pl. II. Nos. 37, 38. There is just a possibility that it is a *γλωσσοκάτοχος* or tongue depressor, but I think that it is improbable.

XI. Needle Holder (I).—A bronze rod 13.75 cm. in length decorated by three bands of turned ornament (No. 28). At each end an aperture about 1.5 cm. deep. This looks like a needle-holder. The rod is curved at one end, either with a purpose or accidentally.

XII. Spatulae.—No. 29 is a good example of the *σπαθωμήλη* or spatula having an olivary probe at its other end. Its length is 16.8 cm., and the breadth of the spatula end is nearly 1 cm. The spatula is slightly concave or spoon-shaped. No. 30 is a large double spatula with a central decorated handle. Length is 19.5 cm., the breadth of the spatulae being 1.5 cm. The spatulae are slightly concave, one more so than the other.

¹ Hipp. *epi gyn. oss.* (Van der Linden), xxxvi.

² Galen (Kühn), II. 581.

XIII. **Slab** of Egyptian porphyry, 12 cm. by 7.5 cm.—This slab doubtless was for mixing the solids of the *Materia Medica*. The slab was bevelled on one side and polished on the other. It is marked No. 31 on Plate XI.

XIV. **Balance**.—A well constructed pair of scales, still in excellent equipoise (Plate XII, No. 32). The beam is 30 cm. in length. It was supported by a central hook. The pans are cup-shaped, about 1.4 cm. in depth and 6.7 cm. in breadth. Each is suspended from the beam at four points, instead of the three in use in modern times.

XV. **Cupping Vessels**.—Three well preserved *vacui* or *vacubitulus* of different sizes were found. They are of the usual shape. The method of application was to ignite a piece of dry linen in the fundus of the cup. The cup was then applied to the skin. As the heated air within cooled it contracted and sucked the skin into the neck of the cup. Cup No. 33 is about 11.5 cm. in height, 9.2 cm. in breadth. No. 34 is 10.7 cm. by 6.7 cm., No. 35 is 9 cm. by 6.3 cm. For convenience of hanging a ring was usually soldered to the cone-shaped apex of each cup. Faint traces of this arrangement may possibly here be seen, but such vessels did not always have rings, and perhaps these never had them.

XVI. **Beaker**.—A decorated purple glass beaker, No. 30, 25.5 cm. high and 10.5 cm. broad at the brim, was found with the instruments in fragments and has now been restored. Its function was probably not medical. It may have been the drinking-cup of the physician, or the vessel used for pouring libations at his tomb.

I desire to acknowledge the great help obtained in preparing this paper from the late Dr. J. S. Milne's *Surgical Instruments of Greek and Roman Times* (1907). Further information and a bibliography will be found in E. Gwilt, *Geschichte der Chirurgie*, i. 1898, 505-6.

RICHARD CATON.

A CYPRIOTE INSCRIPTION FROM KERYNEIA.

THE town of Keryneia is situate on the northern coast of the Island of Cyprus, between the ancient city of Lapethos and the town of Maerria. It was founded by Kephous, the leader of an Achaean colony in Cyprus, simultaneously with Lapethos, which was founded by Praxandros of Therapne in Laonia.¹ Keryneia figured as one of the nine kingdoms of Cyprus during her naval supremacy about the tenth-ninth century B.C. The last king or tyrannus of Keryneia was Themison, who was taken prisoner and deposed by Ptolemaeus Soter I, in 312 B.C., together with the last king of Lapethos, Praxippos, on the ground that they made alliance with Antigonos against him. By the seashore at the western end of the town there is an extensive necropolis of rock-cut tombs, some containing more than one chamber, which were rifled in ancient times; these the inhabitants of the small modern town, following ancient tradition, call 'the Tombs of the Greeks,' *Τάφοις τῶν Ἑλλήνων*.² The ancient town obviously extended southwards, on the plateau overlooking the coast, and included the present quarter of *Ψάριον* or *Ψυάριον* (*Royal Residence*), a word handed down from the Frankish period. Keryneia played a prominent part in mediaeval history from the deposition of Isaac Comnenus, the last Byzantine King of Cyprus, by Richard the Lion-Hearted in 1191, until 1570.³

Cesnola published in *Salamina*, pp. 84-5, two inscriptions in the Cypriote syllabary found at Keryneia mentioning the name of Paphia (Aphrodite). These inscriptions were reproduced in the *Sammlung der griechischen Dialekt-Inschriften* (1883), Nos. 15-16, where the name of the dedicator appearing in No. 15 is restored from *Kestothemias* to *Akestothemias*. In the year 1910 a site in the quarter of *Reatikon* mentioned above, about 500 yards south of the coast, had been dug with a view to being cultivated. The digging unexpectedly brought to light extensive ruins of ancient buildings with concrete floor of Roman period, which having been broken and removed, another stratum of ruins, more ancient, appeared beneath. The

¹ Lyngby, 258. Strabo III. xiv. 482.

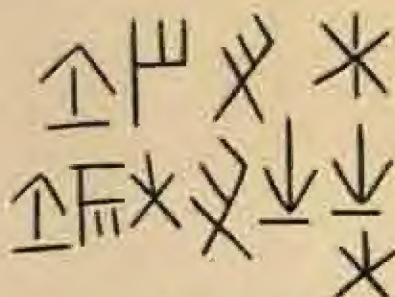
² *op. cit.* pp. 14, 26.

³ Perittianus, *French Travels in the Island of Cyprus*, pp. 1-159, 493-505.

lines of foundations of both periods had, unfortunately, been totally destroyed before any ground plan was prepared. I inspected the site in December, 1910, and saw a huge heap of mostly cut stones removed from these foundations. Further, I noticed on the spot the following antiquities unearthed from the same site: a large red-ware jar (found fixed in the ground by means of concrete and full of ashes); a piece of coarse mosaic; several fragments of clay figurines of archaic and Hellenistic styles; fragments of glass vases and of thick window-panes; terracotta lamps of Graeco-Roman period; various marble capitals of the Corinthian order and other elegantly worked architectural objects, one of which retains traces of red colour; one fragment of a white marble tablet bearing a cross in relief, of fine Byzantine work; and a plastered stone slab 44 by 21 cm., bearing an effaced Greek inscription painted in red. A large number of copper coins has also been discovered, with which I will deal later. By the extant tradition, supported by the finding of the architectural marble object bearing a cross, it would seem that on this site stood an early Byzantine church, which must have been pillaged and demolished during the Arab invasions from 644 to 964 A.D.

In 1911 the horticultural operations were extended to another site adjacent to the one described above, and separated from it by a street. The two sites, however, obviously formed one large square block of public buildings. This digging, too, has unearthed extensive and very interesting remains of buildings, such as a temple, a bath, etc., and three pits or wells at the western end, close by the temple site. Also a large area was found with thick concrete floor, under which foundations of older buildings were discovered. Within the enclosure of the temple there were found several terracotta and stone statuettes, of the sixth to third century B.C. A pedestal of hewn sandstone was also found *in situ*, bearing on the upper surface a shallow basin in which the lower portion of a stone statuette was found actually erected, and on the front an inscription in Cypriote writing, a full reading of which is given below. Among the statuettes there are some wreathed with laurel, representing priests and priestesses of the deity or deities worshipped in the temple. The floor of the bath consisted of stone slabs and baked bricks, and a heap of ashes and charcoal was still in place. Between the temple and this building, but nearer to the latter, over a hundred copper coins were found in one place. Most of these are badly corroded. Among them, however, and those found on site I, I was able to identify one of Vespasian bearing the inscription ΚΟΙΝΟΝ ΚΥΠΡΙΩΝ, and some of Antoninus Pius and M. Aurelius, as well as others of the Byzantine period. On site I were found also some small bronze objects of Roman date, including an implement which in ancient times was doubtless used, as it is nowadays used in certain parts of the island, for dressing hemp.

The inscribed pedestal is 35 cm. long and 33 cm. broad, and the basin measures 28 by 27 cm. The height of the characters varies from 10 cm. to 7 cm. The inscription consists of eleven letters in three lines and reads from right to left.



[From Sponson: Scale 1/2.]

- | | |
|--------------------------------|---------------------|
| 1. a . ke . se . ka. | *Ακη (or *Αγης) κα- |
| 2. te . te . ke . i . tu . ka. | τέθηκε ἱ[ε]ρά |
| 3. i . | ι |

We saw above that in both the inscriptions published by Cesnola and Dreeke the name of Paphia (Aphrodite) is mentioned, and probably these inscriptions came from the same site where the inscription under review was found. This may be assigned to the fifth to fourth century B.C. from the form of the characters and the style of the portion of the statuette found on the pedestal. The right foot of the statue is broken, the left entire and elegantly sandalled.

We may therefore conclude that on these sites once stood the royal palace, the temple and shrines of Aphrodite, and other public buildings. It is greatly to be regretted that all the lines of foundations of the various buildings have been destroyed.

On the south of sites I. and II., and not very far from them, there must have existed the *agora* of the town. This is established by the fact that a square pedestal of grey dark stone, bearing four holes on the upper surface for bronze statuettes and a Greek inscription on the narrow front, was discovered in 1898 in the excavation of the foundation of a house.¹ The inscribed pedestal in question is now built into the wall of a dilapidated vaulted chamber in the courtyard of the Keryneia Fort. The inscription refers to a dedication made in honour of Tiberius Claudius Aeneas of the Quirina tribe by the *Κερυνητῶν δῆμος*, and was set up in the *agora* in the first or second century after Christ.

J. C. PERISTIANES.

¹ This inscription was copied at the Castle of Keryneia by Bishop Worslevorth, and was published by him in the Gazetteer of his diocese in

1896. It is reproduced in my *General History of the Island of Cyprus*, pp. 24-5.

THE HOLKHAM HEAD AND THE PARTHENON PEDIMENT

BEFORE accepting Sir Charles Waldstein's amazing theory that the colossal female head at Holkham Hall belongs to the East Pediment of the Parthenon, we have the right to demand from him some evidence on the following points:—

(1) That there is reason to connect the head with Athens and the Acropolis.

(2) That the material is identical with the other pediment marbles.

(3) That the style is Phidian, or at any rate fifth-century Attic, and

(4) That it is an architectural and not an independent piece of sculpture.

His article in the last number of the *Hellenic Journal* cannot be said to deal with any of them satisfactorily.

The first point, though very necessary for his thesis, is hardly considered by him at all. Matthew Brettingham, who bought the marbles for Holkham Hall, purchased them, it appears, in Italy between 1755 and 1760. It was a period in which Italy was being ransacked for statuary by English collectors, but the antiquity-dealers were not yet visiting Greece, and it is difficult to see how a Parthenon pediment head, displaced centuries before, when the Parthenon became a Christian church, could have found its way into the Italian market. The long arm of coincidences may always be a possible explanation, but until other Parthenon marbles have turned up on Italian soil,¹ we shall be justified in exacting an extremely forcible argument in all other directions to make up for the difficulties of *provenance*.

The question of the material is of first-rate importance for the attribution. If the head is not Pentelic marble, it cannot belong to the Parthenon pediment. On this point Sir Charles Waldstein quotes the opinion of a geologist 'that the head is decidedly of Pentelic marble.' Unfortunately the opinions of geologists on the question of marbles tend

¹ The Labris head was bought in Venice, but it had belonged to Moretti's secretary, and thus had clear claims to Attic origin.

to vary very greatly. Pentelic marble itself is of many grades of quality, and there are Italian marbles of such close similarity that it is very hard to decide between them, as the catalogues of Italian museums frequently show. But in this case the test was a much simpler one. The comparison lay not with Pentelic marble as a whole, but with the marble of the Parthenon pediments. It would not be difficult for a geologist or even an archaeologist to decide whether the marble of the Holkham head was identical with that of the pediments. We have no indication in Sir Charles Waldstein's article that this test was made.

But the question of style is of course the one on which the suggestion will most naturally be judged, and here it must frankly be admitted that the first emotion excited by the article is one of amazement. No doubt the sculptor of the pediment was not a first-class artist, but he did not at any rate commit the faults of the Holkham head. We can judge from the 'Thesous' that he blocked out his heads fairly roughly to catch the prominent lights and shades, but did not waste much fine chiselling on an architectural piece. His faces would be strong and vigorous but not perhaps delicate or expressive. They would surely not shew the smooth, highly-finished, meticulous mediocrity of the Holkham head. No doubt, as Sir Charles Waldstein says, the surface may have been worked over and smoothed, but there are certain traits of Phœidian or fifth-century technique which are bound to appear even in a much mutilated fragment. One of these is the hair-treatment. The Parthenon sculptures and all the works certainly connected with the school of Phœidias shew the use of thick curls of hair with a very pronounced wave, not the thin lightly waving hair strands that we find for instance in the Kirene of Cephisodorus. Praxiteles also used a large tress, and it is not until a much later period that the thin tress of many divisions twisting and curling over one another came into vogue. It belongs to an age of naturalism, and not to one of idealism. If there is another point certain in the Phœidian technique, it is the character of the lower eyelid, which sinks deeply in the middle and rolls over a little to form a lip. This form of eyelid never appears again in Greek sculpture, because Praxiteles and Scopas entirely altered the treatment and their successors never reverted to it. The Holkham head shews the normal unemphatic lower lid of the post-Praxitelean period. The short but strongly bowed and somewhat protruding Phœidian lips have no resemblance to the mechanical flat bow of the Holkham head, though they are not unlike the restored lips of the Laborde head; and finally one may well wonder what resemblance can be found between the heavy manacled fleshy forehead, cheeks, and neck of the Holkham head and the marvellous marble technique of the author of the pediment.

Of course Sir Charles Waldstein is quite right in saying that there are elements in the head of greater antiquity than the Scopæic and Praxitelean types he illustrates. That is simply because the head is a conscious archaistic work of the Græco-Roman school. The real comparison for the Holkham head lies with works like the *Hera Ludovisi* and the restored head of the *Givnone che discende dall'Olimpo* of the Villa Albani or

better still perhaps with the colossal head in Turin shown in Fig. 1. These heads are better than the Holkham head, but they all together show certain quite clear characteristics of the period — (1) A dull treatment of large surfaces of flesh like cheeks and forehead owing to the want of freshness and originality in their art. (2) A very mechanical ending to the lip-corners in a circular hollow drilled out instead of finely finished by hand as in Pheidias and Praxitelean heads. (3) An effort to render by meticulous chiselling the fine impressionist irregularity of classical hair. (4) An archaistic treatment of



COLOSSAL HEAD IN TURIN.



THE HOLKHAM HEAD (FROM A COPY).

FIG. 1.

the eyebrow and eye to produce the effect of more classical simplicity. The Turin head is not so archaistic as the other heads in the two latter points, for it is earlier in date and is intended to reproduce a more violent emotion, but the Villa Albani, the Ludovisi, and the Turin heads between them account for all the details of the Holkham head.

It is difficult to see any ground for labelling the head Aphrodite. Surely Sir Charles Waldstein does not really believe that the wearing of earrings was peculiar to this goddess. On the same page on which he makes this suggestion he prints a photograph of Eirene shewing the earring

hole in the right ear. There is, on the other hand, as we shall see immediately, a fairly clear indication that the head belongs to one of the older goddesses.

Finally we come to the question whether the Holkham head is pedimental sculpture at all. The various points which Sir Charles Waldstein puts forward as evidence for perspective might be more reasonably adduced partly as signs of poor workmanship and partly as showing that the head was turned a little to one side. In all heads so turned there is liable to be some asymmetry. When the modern restorations are removed it will be seen that the original back of the head forms a regular flat surface extending obliquely downwards from the top of the head to the middle of the neck, excluding the back of the left and the whole of the right shoulder. Now the good condition of the head precludes the idea that it ever met with much damage, and marble heads do not split in regular layers with smooth surfaces. The explanation therefore of the restorations is that the Holkham head was never complete, but was originally made as a mask of the same kind as the Turin head.

Such masks were common enough in Alexandria, where marble was rare, and where in consequence the face of a statue was frequently modelled in marble but the hair added in stucco. The Zeus of Otricoli with its many replicas is a case in point. But this technique is of course an invention of Hellenistic art. Besides the heads finished in stucco, of which our museums contain plenty, the same technique was used for acroliths, i.e. statues imitating the dearer chryselephantine technique with fine marble nude parts and wooden or inferior marble drapery. This acrolithic technique is used, for instance, at Lycosura by Damophon, and is known throughout the whole history of Greek sculpture. In Graeco-Roman colossal it is quite usual, especially for female figures where the face was made as a mask and the veil added in a cheaper material. This was the character of the Turin head, and the Ludovisi Hera and its colossal neighbour in the Turin Museum were also made separately for insertion. The round cutting of the lower part of the Holkham head, the missing piece on the neck where the veil would fit in, and the slicing away of the back are clear enough evidence that the head was made for inserting in a statue either of wood or perhaps of an inferior marble, and it must therefore, of course, abandon all claims to a pedimental position.

It was probably a Hera or Demeter head and certainly belongs to the Imperial age. It has none of the grandeur and dignity of the best Augustan work, and I am inclined therefore to put it considerably later. 'Its companion,' writes Matthew Brettingham, 'Lucius Verus, was found in cleaning the Port of Nettuna.' The two may well have been found together, and may belong to the same Antonine period, for the work has all the look of an Antonine production, though it may be as old as the later members of the school of Pasiteles.

GUY DICKINS.



(Scale 1)
FIG. 1.—TROJAN GOLD CUPS FROM MYCENAE.

THE POTTERY CALLED MINYAN WARE.

Treasures of
Orchomenos

THE name 'Minyan' has recently been given to a kind of pottery which was first noticed at Orchomenos by Schliemann in 1881. In the report of his excavation which Schliemann contributed to the second volume of the *Hellenic Journal*, he carefully described the nature and position of this ware. 'It is very remarkable that at Orchomenos painted pottery, with spirals and other Mycenaean ornamentation, also cows with two long horns and the same variegated colours as at Mycenae, as well as goblets of the very same form and colour as at Mycenae, are generally only found down to a depth of about six feet below the surface of the ground, and that at a greater depth, monochrome, black, red, or yellow, hand-made or wheel-made pottery is found almost exclusively, analogous to some of that collected by me in the royal sepulchres at Mycenae. Very frequent here are the large hand-made black goblets or bowls, with a hollow foot and horizontal flutings in the middle, which I also found at Mycenae. . . There also frequently occur fragments of vases which are characterised by their small handles (Fig. 2, a), and others by their long and slender handles (Fig. 2, b), like the pottery of the Sixth City at Troy. All this pottery is either hand-made or wheel-made; and is sometimes black, in which case it has the natural colour of the clay; sometimes red or yellow, in which case it is generally slightly varnished.' The *black pottery in the natural colour of the clay*, which I propose to examine minutely in the following pages.

¹ J.H.S. B. (1884), p. 152 [=Schliemann, *Bericht über meine Ausgrabungen in Mykenae und Orchomenos* (Leipzig, 1881)].

evidently belongs to the class which has long been known to archaeologists as *bucchero nero* and is now usually called *bucchero*.²

Schliemann's observations have been confirmed by the Bavarian expeditions under Curtwängler and Bulle, who resumed the excavation of Orchomenos in 1903 and 1905. No descriptive publication of the pottery found by them has yet appeared, but in the first volume of his Report³ Bulle gives an adequate account of its distribution. In the first season a mass of monochrome sherds, to which the general name 'Minyan' was



FIG. 2.—SCHLIEMANN'S FRAGMENTS FROM ORCHOMENOS.

temporarily applied, was found in association with Mycenaean pottery; at a lower level the Mycenaean pottery no longer appeared, but only Minyan

² The word has little meaning to modern Italian. It is not used popularly, and dictionaries vary from 'tuh' to 'china jar.' The *Vocabolario della Crusca* (ed. 1729) says: '*vaso fatto di terra scura, per lo più rosso; buche, si usavano ancora del bianco e del nero, che si fabbricano nell'India, e in Portogallo.*' Mr. H. L. Hobbs tells me that the aromatic pottery in question was first imported into Portugal from Central and South America in the Sixteenth Century, and was extensively imitated there during its extraordinary vogue in Europe. The name was derived from Portuguese and Spanish sources. 'In Italy the term has been taken in a very different acceptation. We find the words "*Vasi di Bucchero nero*" employed in their writings by the Italian antiquaries, to represent the black pottery discovered in the ancient

Etruscan tombs. If we recollect that the earliest excavations made on the site of the Etruscan necropolis took place at the very time when the taste for American ware was asserting itself in this country, we may assume that the signification of the newly-introduced name was extended to black and unglazed pottery in general, without distinction of age or origin. In this way alone can we account for the adoption of such a strange misnomer."—M. L. Rolin in *Pottery Workshop: The Edison Idols. I.—The Noble Bucchero*, p. 50 [Paper read at the Meeting of the North Staffordshire Literary and Philosophical Society, Oct. 23rd, 1896].

³ *Orchomenos* I. pp. 9, 15, 53 [= *ibid.* II. 1. paper. *Arch. d. Hist. et. Kl.* xxix. Bd. II. Abt. (1907)].

ware with some isolated traces of *Matthuderei*. This stratification was tested in the second season, and it was thoroughly established that beneath the Mycenaean remains at Orchomenos there lies a deposit of considerable bulk which is characterised by monochrome grey and yellow pottery.

Name

The working name 'Minyan,' the invention of which is credited to Schliemann, has now been abandoned by the Bavarian excavators, for the good reason that it prejudges an important historical question by linking together the special attributes of the Boeotian Orchomenos in archaeology and literature. But I cannot discover when Schliemann gave this name to the pottery, and in the long interval between the German excavations no use has been made of it, although numerous finds of the pottery have been reported. Schliemann indeed recognised his Orchomenian *bucchero* as the same that he had found in the Sixth City at Troy. He had already claimed the Trojan pottery as 'Lydian,'⁴ and this name, even worse than 'Minyan,' as having more definite significance, has occasionally and even recently been used for the Greek fabric.⁵ It is too late, however, to repudiate 'Minyan,' which has now been widely adopted, nor is it useful to substitute an alternative until the origin of this pottery has been as well established as that of Minoan or Cycladic ware. But a descriptive name, where possible, is better than a local name, local always better than racial, for in the labyrinth of Aegean archaeology progress can only come by accurate observation and intelligible record, and historical theory makes a misleading clue.

Distribution

In the thirty years since Schliemann's fragments came to light, the same pottery has been found in many other parts of Greece, and although the great quantity of new material from Orchomenos has not yet been illustrated, it is safe to suppose that it will not add very much to the knowledge which has been gained from other sources. Wace and Thompson have indeed already stated that the Orchomenian fabric, so far as they have seen it, does not differ from their own finds at Lianokládi, which produced more Minyan ware than any other site explored by them. They found a good deal at Zerélia, but little in central Thessaly and none at Rakhmáni, their most northern site.⁶ In the more extensive excavations of Tsountas at Dimini and Săsklo a considerable amount was found chiefly in tombs, which the accompanying weapons show to belong to the Bronze Age.⁷ The distribution proves that Minyan ware reached Thessaly from the south.

In southern Greece the distribution is more even. Sherds have been found in Attica, notably at Eleusis⁸ in association with the pre-Mycenaean pottery called *Matthuderei*, at Thorikos,⁹ and in tombs on the south slope of the Acropolis at Athens.¹⁰ Only one doubtful example is preserved

⁴ *Iliad*, p. 587. Schliemann really meant the *Pachylomast*, but did not properly distinguish it.

⁵ *Apex*, Ep. 1912, p. 21 (Fig. 12, the ringel stem of a goblet from Eleusis).

⁶ *Prehistoric Thessaly*, pp. 124, 126, 129.

⁷ Tsountas, *Δελτία επί Στερεάς*, p. 132.

⁸ *Ep. Apex*, 1898, p. 51; 1912, p. 21.

⁹ *Prehistoric Thessaly*, p. 222.

¹⁰ *Ep. Apex*, 1902, p. 130.

from the Acropolis itself,¹⁰ but it is likely that here as in many early excavations of prehistoric sites the Minyan ware was thrown away with other undecorated pottery.¹¹ The fabric has been identified in Megaris.¹² Several pieces were found by Schliemann in or over the shaft-graves on the Acropolis at Mycenae, and much has since been excavated in the town.¹³ Tiryns is also yielding quantities.¹⁴ The first contact with the invading Cretan culture is probably represented again in a curious vase from the *dromos* of a bee-hive tomb at Pylos (Kakóvates).¹⁵ and at Kampos in Laconia.¹⁶ Minyan burials have apparently been found so far west as Lenks.¹⁷ But the centre of fabrication in the Peloponnese, corresponding to the great Bocotian settlement at Orchomenos, was revealed by Vollgraff's excavation of the Aspis hill at Argos, where Minyan ware and *Mattmalerei* were found exclusively.¹⁸ Another settlement appears to have existed on the site of the Temple of Aphrodite in Aigina.¹⁹ The most recent addition to the sites is Phylakopi in Melos, where the second excavation of 1911 produced important examples of the fabric, which had almost escaped notice in the earlier work of 1895.²⁰ Similar sherds are said to have been seen in Paros.²¹

By combining these scattered records it is possible to give a fairly complete account of the pottery itself. In this connexion the description given by the latest discoverers, who handled large quantities of sherds with full knowledge of their identity, is worth repeating. 'Technically it is one of the best of prehistoric wares; artistically its merits are very humble. It is usually of a slaty gray colour, which sometimes varies to a yellowish brown on one side, and on the other to a much blacker hue. The colour is usually the same right through, and although there is sometimes a brownish discoloration at the centre of the break, the surface is never marked off by a clear distinction of colour. It is wheel-made, although only slight marks of this appear on the outer surface, which is smooth and rather soapy to the touch. The clay is well baked to a fair hardness. One merit it has, and for the excavator a very great one: its appearance is unmistakable. It is also utterly different from anything of which the clay of Melos was capable: it could never pass at Phylakopi for anything but an imported fabric.'²² The

¹⁰ *Atropolis Paen.*, I, p. 1.

¹¹ It is for instance incredible that none was found in the American excavation of the Argive Heraeum, where the painted *Mattmalerei* was noticed. One suspects that Minyan sherds were well represented among the 'large number belonging to the "Primitive" class which "had no decoration of any kind and were therefore thrown on the rubbish heaps"—Argive Heraeum, II, p. 60.

¹² *Att. Mit.* 1894, p. 95 (Ninos and Minos).

¹³ *Mycenae*, pp. 151, 241, etc.; *Mykenische Vasen*, p. 53; *Proc. Thessaly*, p. 224.

¹⁴ *Att. Mit.* 1913, p. 69; *Proc. Thessaly*,

p. 224.

¹⁵ *Att. Mit.* 1909, Pl. XXIV, 3. Imported probably from the Argolid.

¹⁶ Mr. E. N. Grollier tells me that he has recently seen pieces from this site in the National Museum at Athens.

¹⁷ *Arch. Anz.* 1909, p. 122; *op. Proc. Thessaly*, p. 229.

¹⁸ *B.O.H.* 1906, p. 2.

¹⁹ *Proc. Thessaly*, p. 222.

²⁰ *R.S.A.* xvii, p. 16, *Phylakopi*, p. 154.

²¹ *Proc. Thessaly*, p. 224.

²² Dawkins and Droop in *R.S.A.* xvii, p. 17.

description makes it clear that Minyan pottery, in spite of its modest appearance, is a well-marked ware of highly specialised technique. The shapes are the same at Phylakopi as elsewhere, and certain pieces were distinguished as imitations in the local burnished fabric, red or black. This observation agrees with the evidence from every other site in Greece: beside the smooth grey *bucchero* proper there occur varieties of inferior technique, ranging from fabrics which are black all through to brown and red wares with black polished or painted surface, or even without the colour, but showing Minyan influence in shape alone. At Troy, on the other hand, such variants do not occur. Thus at Orchomenos the pottery is 'monochrome grey or yellow ware.' The Minyan ware from the Aspis at Argos is divided into three fabrics²² by Vollgraff in his careful publication:—

Variant Fabrics



[Entered from one handle and section: Scale 1/2]

FIG. 3.—CUP FROM ARGOS: GREY BUCCHERO.

- I. Light red or brown ware.
- II. Black *bucchero*: red or grey clay with surface coloured, sometimes on exterior only.
- III. Grey *bucchero*, coloured all through.

All these wares are highly polished, and show the same forms, but with some preference. They clearly form a single group, differing only in technique, and in this respect I. and II. are more or less distant imitations of III, which is the only true *bucchero* of the group and the only kind of Minyan ware which is common to the rest of Greece, the Cyclades, and Troy. Vollgraff says of the grey fabric: '*Pour elle, plus que pour toute autre, la*

²² Fortwangler and Loeschcke made precisely the same classification of the scanty material from Mycenae (*Mon. Faust.*, p. 24).

question du ou des centres de fabrication se pose d'abord, vu que, pour la façonner, il semble qu'on se soit servi d'une espèce particulière de terre ou de roche pulvérisée, susceptible de prendre à la cuisson les beaux tons gris, ainsi que la remarquable consistance qui la caractérisent. La même question ne se pose pas avec autant d'urgence pour les autres genres de poterie préhistorique de l'Aspis, qui nécessitent, non l'emploi d'une matière spéciale, mais seulement l'application de quelques procédés techniques déterminés, dont la connaissance pouvait se répandre de proche en proche. These other fabrics were contemporary, for there is no sign of progressive development in the material from the Aspis, and pieces of such kind were found in constant proportion at every depth.

In the grey bucchero proper the commonest shape at Argos is a small form cup strongly resembling the classical Greek *cantharos*. An example has



[Restored, height uncertain; Scale 1]

FIG. 4.—Cup from Argos: Grey Bucchero.

been restored from the best of several fragments recently presented by the Hellenic Government to the British Museum (Fig. 3). The high ribbon handles are the characteristic Minyan feature. It will be noticed that this is the shape to which Schliemann's fragment 6 belongs (Fig. 2). The form of handle, as well as the sharp division of opposite curves in the profile of the body, must be derived from a metal original, and the same technical influence probably explains the survival or revival of the type in Greek and Etruscan pottery. A gold model was actually found in the treasure of the

Fourth Grave at Mycenae (Fig. 1, *a*).²² It is however by no means certain that all the Argive cups possessed two handles. The only complete specimens from the Sixth City at Troy²³ are one-handled, and the Argive material is fragmentary. But there is no essential difference: the variation between one and two handles runs all through the Trojan series, and the gold cup shows that the two-handled form existed at this period.

Similar handles appear upon a different type of body, which lacks the hollow, metallic top and is entirely convex. Another fine grey fragment in the British Museum, also from Argos, gives this shape by restoration (Fig. 4). The height of this cup and the exact form of its base are not known. Vollgraff illustrates an example in the red fabric.²⁴ It is the common Trojan²⁵ form which Schliemann refers to (above, p. 126). The same type with shallow body is represented by three polished yellow cups from the



[One handle restored: Scale 4]

FIG. 5.—CUP FROM DIMITI: BLACK FABRIC.

Fourth Shaft-Grave at Mycenae,²⁶ and a very fine specimen in the British Museum, with sharp lip and shoulder, comes from Dimini in Thessaly (Fig. 5). The last has black polished surface with red clay underneath, and is therefore an imitation of *bucchero*.

A larger bowl is mostly confined to the black fabric, the so-called 'Argive Minyan,'²⁷ which is made of red or grey clay with superficial

²² Mycenae, No. 339.

²³ Schliemann, *Scavels*, 3176, 3177; cf. *How* p. 523 (where six examples are illustrated); *Troja* v. (Hos.), i. Pl. 39, v.

²⁴ *J.E.H.*, 1906, p. 9, Fig. 3.

²⁵ Schliemann, *Scavels*, 754 (= *Hos.*, No. 1162),

1210, etc.; and for the shallow form *S.E.*, 3686 (= *Troja* v. *Hos.*, i. Fig. 200).

²⁶ Mycenae, No. 319; *Myk. Theoyf.*, Pl. V, 22.

²⁷ *Proc. Thessaly*, p. 223.

colouring and polish. My example (Fig. 6) is reproduced from Vollgraff's paper, where fragments of other types are illustrated.²⁹ The chief variations are in the number of flutings below the lip and the disposal of the impressed lines on the body. The small handles are of the same metallic type as before, but adapted to the weight and function of the larger utensil. Schmidt has already traced the development of this handled bowl at Troy.³⁰ I am not sure if the incised decoration exists on Trojan bowls.³¹ It may be one of the few peculiarities of the Greek or even of the Argive fabric. But it is worth noting that the system of lightly engraved parallel lines resembles the *Rillenband* which is a common form of Trojan ornament in the Sixth City.

Perhaps the most remarkable Minyan vase is the heavy goblet formed by adding a cylindrical ribbed stem to the last type of bowl. The flat loop



(Rehman; Scale not known)

FIG. 6.—INCISED BOWL FROM ARGOS; BLACK SURFACE.

handles which appear so frequently among the sherds might belong to either vase. Schliemann's first fragment from Orchomenos is one of these (Fig. 2, a). Fragments of the hollow stems are also very common in Greece, and several are shown with the Trojan pottery in Berlin.³² Wace and Thompson, who kindly permit me to reproduce an example which they found at Lissopkladi (Fig. 7),³³ distinguish a local variation in the Boeotian and Argive stems, the

²⁹ *B.C.H.* 1906, p. 13, Fig. 9; cf. Figs. 10-15.

³⁰ *Zeits. v. d. D.M.*, pp. 246, 265, 290.

³¹ I noted its occurrence on Nos. 3361-3385 in Berlin, but the Catalogue does not distinguish these pieces, and I have not been able to verify the reference.

³² *Schliemanns Samml.* 3143-4, 3168, 3497-

3501, etc.

³³ *Proc. Academy*, Fig. 135. The handles of this goblet are abnormal, but Wace assures me that there was good evidence for their restoration. For the usual flat-loop see *idem*, Fig. 102; *E.S.A.* xvii. Pl. VII (Phylakopi); *ibidem*, Fig. 46 (Saklo).

latter being curved. But this shape, which is represented in Schliemann's fragments from Mycenae (Fig. 8),²⁰ and in complete specimens at Phylakopi,²¹ seems properly to belong to an entirely different vase of much earlier origin, which modified the rigid lines of the later goblet. Its metal prototype may



[Scale II]

FIG. 7.—GOBLET FROM LIAÑORLADI. GIFT BYCERES.

be seen in another plain gold cup from the Fourth Grave at Mycenae (Fig. 1, *b*),²² which Schliemann rightly compared with certain Trojan pottery

²⁰ *Mycenae*, No. 230.

²¹ *B.A.A.* xvii, Pl. VII. 4, 201.

²² *Mycenae*, No. 343, p. 234.

of the First City. The Trojan cups are exactly similar (Fig. 9):³² as there is no reason to doubt their early date—Schliemann found them 'in a depth of fifty feet' at Hissarlik—they furnish a useful illustration of the persistence of a simple type. The unique vase found at Pylos (above, p. 129) belongs to this group, and is a monochrome fabric, though not *lucchovo*. It is evident that Minyan ware brings a new element into Mycenaean pottery. In particular the characteristic Mycenaean 'champagne-glass' must have been derived from Minyan models after the Minoan contact with the mainland. Five out of the fifteen examples in the British Museum from Ialysos are undecorated and show the heavier short-stemmed form, and another early type is angular, like the second Minyan goblet.³³ These are the only vases of elaborate shape which appear in Mycenaean pottery in monochrome technique.



FIG. 5.—FOOT OF GOBLET, FROM MYCENAE.



FIG. 6.—CUP FROM TROY (FIRST CITY).

The same curved foot with little or no stem was adapted to the Minyan bowls. Fragments of such feet were found at Argos, and Furtwaengler and Loeschke gave an illustration, which seems to have been restored from the insufficient fragments which they had.³⁴ I would suggest as complete examples of the type two monochrome vases from the Sixth Grave at Mycenae (Fig. 10).³⁵ These are of pale yellow clay like other local fabrics, but the shapes are certainly Minyan, and are paralleled at Troy. A silver vase of closely related form was found at Gourniá with fine Kamáres ware,

³² *Hiss.* No. 31, p. 224; *Troja v. Hiss.* Pl. II. 5, 4 (Sparta), etc. *Mycenae*, No. 33, Fig. 117; *Schliemann Samml.* 151.

³³ *Myl. Faun.* Pl. II. 17; cp. *B.S.A.* xvi.

³⁴ *Myl. Faun.* p. 54, Fig. 30.

³⁵ *Myl. Thongef.* Pl. X. 48, 49.

and seems from its delicacy to be Minoan work.¹¹ But we know nothing about the origin and circulation of metal models, which may well have been a medium of international influence in ceramic art.

It will be seen that the recorded shapes of Minyan vases are few, and heavily marked as members of one family. They resolve into three main types, which Internet considerably: the deep high-handled cup, the shallow low-handled bowl, and the curved or angular goblet; and a feature common to all is the flat metallic handle set vertically. Some other vases could still be added to the list,¹² but they are unique or rare, not obviously related to other Minyan forms and cannot yet be regarded as typical. The accident of technique alone will not establish origin. As Minyan forms were copied in local monochrome fabrics, so it is likely that the *bucchero* process was imitated in other shapes.

I have described the varieties of Minyan technique: a standard fabric of fine grey *bucchero* appearing everywhere in Greece in company with



[Scale nearly 1:1]

FIG. 10.—TWO VASES FROM MYCENAE (GROUP IV): YELLOW CLAY.

Continued at
Troy

local imitations. It is generally accepted that the grey ware is identical with certain pottery of the Sixth City at Troy. The problem is to determine its origin in each place. As Wace and Thompson put it: 'There is at Troy in settlements VI and VII a considerable quantity of Minyan ware:—their conclusion being that it was derived or imported from the Boeotian centre at Orchomenos.'¹³ It has been proved, however, that at neither of the two great settlements of Orchomenos and Argos, nor elsewhere in Greece, do any traces exist of the earlier stages of this highly developed

¹¹ *Greece*, Pl. C 1.

¹² *Proc. Thessaly*, Fig. 323 (Sesklo), Fig. 58c (Thaghi); *Myk. Thaghi*, Pl. V, 25, X, 50

(Mycenae).

¹³ *Proc. Thessaly*, pp. 21, 231.

fabric; while it can, I think, be demonstrated without difficulty that 'Minyan' ware is the native pottery of Troy.

In the similar question of the origin of Mycenaean art, which was answered by the excavations in Crete, the painted decoration was so remarkable that the presence or influence of Minoan pottery in Greece could hardly be mistaken. But in the case of pottery which is devoid of decoration, a new method of comparison must be adopted, and special attention must be given to technique and form. The technique has already been described as a variety of *bucchero*; the chief distinction being that, while most other *bucchero* is black in substance, Minyan ware is grey. The clay is normally close and hard, but the surface is rather soft, and is polished to the 'soapy' texture which has been remarked. The vases are wheel-made, but the lines of burnishing often obliterate the horizontal marks of turning. The furrows made by the burnisher are very conspicuous. Both the grey colour and the high polish are qualities which can only be produced by special process and material.

"All natural clays contain oxide of iron, which affects their colouring when fired. This is usually peroxide, in anhydrous or hydrated form; the latter is yellow, but under the action of heat it loses its three molecules of water, thus becoming anhydrous peroxide of iron, of bright red colour. But the red can only be kept in the clay if a free supply of oxygen prevents the reduction of the iron by the gases of combustion. In the latter case the red peroxide (ferric oxide = Fe_2O_3) is reduced to protoxide (ferrous oxide = FeO), which is black. But the clays which will naturally fire bright red or black in oxidising or reducing atmospheres are few in number, for even where iron oxide is present in sufficient quantity, other impurities in the clay are likely to modify its effect. Primitive pottery, which is burnt in an open fire, can only acquire an even colouring by happy accident. It is normally dull brown, with lighter and darker patches where the flame or smoke has caught it. These facts may be observed in the rough pottery of any age or country, but the early fabrics of the eastern Mediterranean coast, from Thrace to Egypt, afford peculiarly apt examples. In these lands the progress of ceramic art was slow, and painted decoration, so soon applied in Greece and the European islands, seems to have been beyond the skill of the native potter. The nearest parallel in the ancient world is the pottery of

Technique of
Early Pottery

* I have received much practical assistance, especially in regard to modern processes, from Mr. J. H. Mott, Art Director, and Mr. W. Thomassen, Chemist, of Doulton's Pottery at Lambeth, who have also read the proofs of the technical part of this paper.

** Fraunhofer quotes the highest percentage of 14; his normal proportion is about 8 per cent. (*La Céramique Primitive*, pp. 6, 53). Mr. Thomassen does not accept Fraunhofer's account, and gives me the following note: 'Clays contain iron as a ferruginous silicate for the most part,

but occasionally the iron is present as the peroxide, in which case it is free, as no ferric silicate is known to exist in nature. Such clays are mainly surface clays. Oxide of iron, whether existing as ferruginous or ferric oxide, free or in combination as clay, under the action of heat and an excess of air, produces a red colour, more or less intense according to the iron content of the clay and the temperature of ignition, and is also influenced by the other constituents of the clay.' The effect of firing is the same in any case.

northern Italy. The experiments in painting being unsuccessful, designs were executed by modelling or engraving. Plastic ornament principally occurs at Troy, and incised work shows its highest degree of development in Cyprus. Colour effects could only be obtained by controlling the natural changes of the clay, and in the absence of painted decoration, this manipulation of the surface was perfected within its narrow limits. Starting therefore with the primitive discoloured pot, the possibilities of decorative improvement were three: the production of a clear colour, bright red or yellow; a dark tone, black or gray; or a combination of these two extremes. In his valuable study of these types of pottery, Myres has very acutely remarked that the clear colours, usually red, are prevalent in dry climates, and that in rainy districts black ware is generally found.⁴⁶ His explanation is that the difficulty of obtaining dry fuel, with which alone a rapid fire can be made, caused the northern potter to despair of producing a clear pot; but that making a virtue of necessity he contrived a black surface, on which the inevitable smoke-stains were turned to good account.

Red Ware

The processes by which the red colour could be intensified are of interest in tracing the history of Minyan ware, which represents the perfection of the opposite technique. An oxidising atmosphere demands a regular draught of air, that is, the use of a kiln. Conversely, the atmosphere of a potter's kiln is intensely oxidising. This condition will produce a clear colour, but the shade of red or yellow depends upon the composition of the clay. Where red pottery was in fashion, an artificial colouring was no doubt added. Thus the beds of fine red clay in Attica, which had made the reputation of the local pottery, were apparently not sufficient for the industry in the middle of the fourth century B.C., for an inscription of that date from the Acropolis records the protection of red ochre (*μῆλρος*) in the island of Ceos as an Athenian monopoly.⁴⁷ The severe penalty, confiscation of ship and cargo, which is provided in case of export elsewhere than to Athens, indicates that some economic interest was involved, and this may well have been the pottery trade. Attic vases of the period show that if ochre was used it was mixed with the paste. If the local clay was white, the pigment was applied to the surface of the vase. The red-ground Corinthian ware of the late sixth century, which represents a last effort to compete with the Attic trade, was produced in this manner. Any ferruginous clay, earth, or rock would give the desired effect; a haematite wash (not 'glaze,' for it is not fused) has been recognised on Egyptian and Asiatic pottery;⁴⁸ but it is of course impossible to tell from the pot what was the natural condition of the iron oxide. Where the surface colouring is of appreciable thickness, the ochre or pulverised haematite must have been incorporated in a clay slip.

⁴⁶ *Journ. Anth. Inst.* 1904, p. 379 (The Early Pot-factories of Asia Minor).

⁴⁷ *I.G.* II. 548.

⁴⁸ Petrie, *Nagada and Ballas*, p. 37, *Theban* Pottery, p. 13; Ormerod in *E.S.A.* xvi, p. 64. Mr. Thomson informs me that haematite and

ochre give browns rather than reds. The dark tinge may be due to the much higher temperature of modern firing; but in the case of bright red colours the possibility of haematite pigment must be put to the test.

In any case the red colour is only a concentration of the iron oxide naturally contained in clay. It was developed by heat in an oxidising atmosphere, and was therefore dependent upon suitable material and efficient firing.

A black surface on the other hand could be produced anywhere, although a higher skill was necessary for the perfection of the *bucchero* technique. If a clean pot cannot be turned out, it is a simple expedient to make it of such a colour that the irregularity will not show; and the first method of doing this is to utilise the faults of firing, and to smoke the pot. Fumigated pottery is the natural outcome of inadequate technique, and is therefore constantly found among primitive peoples. It is the 'smother-kiln ware' of Roman-British archaeology. The process consists in covering the fire which contains the pots with some close material such as turf, as in preparing charcoal. Incredible as it appears, it is generally accepted that the smoke permeates the clay until the whole substance is saturated with carbon. Franchet and other practical authorities have actually produced *bucchero* by this method.⁴⁹ But is it not more likely that the grey colour beneath the surface is due, not to a deposit of carbon, but to the formation of protoxide of iron by the reducing atmosphere which such firing ensures? Smoke, which consists of particles of carbon in suspension, is much less able to penetrate than gas. But soot or similar carbonaceous matter is necessary to secure a dense black surface, and especially to produce the brilliance which is an important feature of all black ware. It is evident that a smothered fire cannot give a high temperature. So in the case of *bucchero* which is coloured in any other way with a carbonaceous pigment, as by mixing organic matter with the paste or impregnating the pot with resin,⁵⁰ if air is admitted this will be burnt right out of the clay instead of merely charring. For this reason *bucchero nero* is often insufficiently fired. Boshan records that a piece of archaic Greek fabric which he excavated in Samos became disintegrated in water.⁵¹

But these observations only apply to primitive pottery; our Minyan ware is of much finer make, though it originated in 'carboniferous' *bucchero*. It is clean and hard, and the even grey tone shows that it was not coloured by smoke or any pigment introduced through the surface. It follows that the clay was either artificially prepared by mixing with a metallic oxide such as manganese, or naturally acquired this colour by the transmutation of peroxide into protoxide of iron. The simple test of recovering the peroxide by heating sherds in contact with the air shows that the latter process was used. The gradual disappearance of the grey colour also proves that this is not carbonaceous. The pottery was therefore fired in such a manner that the delicate grey was not affected by oxygen, which turns it yellow. Exclusion of the air might be obtained by the use of 'seggars' ('saggers') or a 'muffle' kiln, either of which implies great technical knowledge and ability. In an ordinary kiln the pottery is fired in contact with flame and smoke. Seggars are fire-clay

Black Ware

Bucchero

Grey Bucchero

Minyan Colour

⁴⁹ *Ceram. Princ.* p. 93, note b.

⁵⁰ Alternative processes are quoted by Myers

and Ormerod, *l.c.*

⁵¹ *Ant. inst.* u. *Stat. Necrop.* p. 120.

boxes in which porcelain is stacked in such a kiln. The muffle is a closed oven, and is chiefly used for fusing fine enamels. The purpose of both contrivances is only to shield the pottery from grit. The atmosphere is highly oxidising, for air is enclosed in the chamber, and the gases of combustion are excluded. A reducing atmosphere must be created by exhausting the oxygen and substituting a reducing gas. This has been done by introducing ammonia, or even sawdust, before firing. When heat is applied, the oxygen is exhausted by combustion and the muffle is charged with reducing gases. But such methods are troublesome and uncertain, belonging rather to 'crank' pottery, or to experiments in seeking colours which metallic oxides will not give in normal conditions. Their invention seems to depend upon chemical knowledge, and it is most unlikely that ancient potters can have known them. In modern commercial pottery a reducing atmosphere is so difficult to manage that it is not desired.

There is however an English process of the present day which may explain grey *bucchero*: the making of Staffordshire 'blue' bricks.²² These are stacked in a kiln and fired in the usual manner until the highest point of temperature is reached. Then the furnaces are 'muffled,' i.e. the fire-holes are closed so as to cause imperfect combustion. The kiln is thus filled with smoke and gas, by which the peroxide in the clay (red, ferric oxide) is reduced to protoxide (black, ferrous oxide). In spite of the heavy smoke the dark colour is produced entirely by chemical means and is not carbonaceous. The reducing atmosphere is maintained until the end of the firing, but as the fires die out the air reaches the interior of the kiln, where the mass of bricks is still hot enough to burn off the deposit of soot, but not so hot as to change colour again. Highly ferruginous clay is used, which would give a bright red colour by ordinary firing. The black colour therefore depends upon proper regulation of the furnaces, and the same difficult, but quite empirical method was probably perfected by the 'Minyan' potters. It would require great skill to produce the clear grey ware, as well as suitable clay. If fumigation were prolonged, a black surface would result; if air were admitted too soon the grey would turn brown, yellow, or dull red. Such expert firing for fine pottery is an operation of extreme difficulty and impossible if its action is not understood.

So indeed the prehistoric Greek potters appear to have found, for their efforts to reproduce the Minyan fabric were unsuccessful. I have already emphasised the fact that in the Greek settlements of Orchomenos and Argos, as well as in the scattered finds elsewhere, inferior wares occur beside the

imitations in
Greece

²² I am indebted to Mr. W. Thomason, Chamberlain of Dudley's Pottery, for this modern parallel. The statement of P. Marguerite de la Charrière (*Rev. des Et. grecques*, 1907, p. 256, quoted in *Proc. Soc.*, 1908, p. 43) that the method of smoking to the point of saturation is still practised in England ('pour les faïences de Wevgart' (if this means Wedgwood) is

not only false but ridiculous. Wedgwood 'black basalt' is a stoneware, fired to a temperature of about 1400° C. until the paste is vitrified, and could not contain carbonaceous matter. It is stained with metallic oxides, such as manganese and cobalt, and is not fired in reducing atmosphere.

standard *bucchero*. At Orchomenos these are 'red and yellow,' that is, with no attempt to get the colour, but frank imitations of the foreign forms in ordinary oxidised technique. No doubt there are intermediate stages in the black ware of Orchomenos. At Argos the greater quantity was of inferior make: red or yellow, as at Orchomenos, and red with blackened surface, which is obviously an imitation of *bucchero*, since it reverses the order of evolution. The native potter found it difficult to fire a black pot hard and still to keep its colour. His remedy was to fire in his own fashion, producing the normal brown or red tones. The pots were then fumigated at a lower temperature, which is the only way, without painting, in which a superficial black colouring can be applied to a thoroughly fired and oxidised clay.⁵² It is therefore evident from technique, apart from distribution of the pottery, that the inferior wares which form so large a majority of the finds in Greece are not the immature stages but imperfect imitations of a difficult fabric. At Troy, on the contrary, the pottery which is not grey throughout is grey ^{Troy} with yellow surface;⁵³ that is to say, it has been oxidised, whether by accident or design, in the last stage of firing. In the cooling there is great danger that the surplus oxygen will reach the pots while they are still hot enough to change colour; and this is precisely what has happened to the yellow Trojan ware.

The second distinctive feature of the Minyan fabric is the soapy texture ^{Minyan Surface} of the surface. This quality is inherent in the clay, and cannot be induced by artificial means: Only a plastic, 'fatty' clay will burnish. The cause of plasticity is not known, but it partly consists in fine division of the silica and alumina crystals which are the base of clay, and in their power of holding water between them. Under the wet hands of the potter, as the wheel revolves, these fine particles are washed down into the minute cavities of the clay until a perfectly even surface results.⁵⁴ Burnish is subsequently obtained by friction with a smooth instrument: in modern work a piece of worn steel is used for this purpose. An 'open' clay will neither give a solid surface nor bear polishing, but crumbles under pressure. The natural ability of Minyan clay to burnish probably helped to determine, in the period of free technique, the dark colour which can alone display the lustre. The difference between the reflecting powers of black and red surfaces need hardly be remarked; but it is well illustrated in the well-known prelynastic Egyptian vases which are bright red with a black band at the lip. The polish is certainly stronger on the black part, but it extends all over the surface, and is hardly visible on the red colour.⁵⁵

⁵² *Cyrena, prehist.* p. 30.

⁵³ Schmidt, *Schliemanns Samarkand, postum.*

⁵⁴ *Cyrena, prehist.* pp. 2, 24, 72.

⁵⁵ Petrie advanced the ingenious theory that the brilliancy of the black portion is heightened by a sort of glaze formed from magnetic oxide fired by carbonyl, 'a gas which generally results from imperfect combustion' (=carbon

monoxide)—*Napata and Donga*, p. 37. Koertge's statement (*Alt. Mitt.* 1899, p. 74) that some of these vases at Bonn are touched with graphite may well be correct, but has no value unless supported by the chemical test. I am equally unable to find evidence that the pots contain no carbonaceous colouring (Petrie, *loc. cit.*).

Bucchero and
Metal

Lustrous black pottery at once challenges comparison with metal, and to this fact are due the forms which it affects and the traditional decoration of *bucchero*, modelled, incised, or painted. The *bucchero* fabrics may also have influenced the shapes of metal vases, for a plastic clay naturally acquires upon the wheel just such curves and ridges as are assumed by the component parts of a metal vase in process of bending and joining. The curious interaction of *bucchero* and metal fabrics is probably the cause of the existence of the Minyan cup form after the interval of a thousand years in the Hellenic and Etruscan *caulharos*. It is easy to understand how Schliemann, well acquainted with the classical Etruscan ware which has given its name to the whole fabric, identified it with his Trojan *bucchero*, and argued that as the Etruscans were of Lydian origin, the Asiatic pottery which resembled theirs was 'Lydian' too. It is indeed a curious coincidence, and the theory of an Asiatic origin for Etruscan pottery is attractive. But recent investigators have failed to find a sudden intrusion of *bucchero* in Italy.²² It appears to have developed naturally from the primitive *impasto*; and while the immigrant Etruscans no doubt directed the manufacture of a type of pottery to which they were traditionally accustomed, the approximation of Etruscan to Trojan forms probably came through metal technique and the importation of archaic Greek models.

Etruscan
Bucchero

Greek
Bucchero

The rarity of Greek *bucchero* of the classical period is no doubt due to its incapacity for the decorative treatment in which other Greek pottery of the time excels. On the black ground only white or brightly coloured pigments could be used, and these were always less durable than the black enamel of the Greeks, while the polished surface gave no hold to the paint. The result is that, while traces of painting are frequently seen on Greek *bucchero*, as in the Etruscan 'Polledrara' fabric, the colours seldom survive at all and are then extremely fugitive. The Ionians avoided the difficulty, as the Minoans had done, by substituting a black enamel for the body colouring and burnish. Boecklin has enumerated the many advantages which this brilliant fabric, the so-called 'Aeolic' ware, possessed against the original *bucchero*.²³ But the latter still persisted, and examples are known from most Asiatic Greek sites. The largest quantity, as well as the largest vases, came from Naukratis, and several of these pieces bear votive inscriptions. As some of the dedications refer to natives of Mytilene, and all are written in Aeolic dialect, it was suggested by the excavator that the *bucchero* fabric of classical times had its chief centre in Lesbos.²⁴ So far as the present material goes, his conclusion is certainly correct. It does not however follow, but rather the reverse, that the improved enamel substitute was also Aeolic. As a matter of fact the home of the 'Aeolic' fabric appears to have been in Rhodes, where Biliotti found many examples at Cameiros

²² Summarised by Walters in *Brit. Mus. Catalogue of Vases*, I. ii. p. xiii.

²³ *Ann. Inst. Néap.*, pp. 85-87.

²⁴ E. A. Gardner in *Naukratis* ii. (1885), pp. 47, 95, followed by Leach in *Arch. Anz.* 1891, p. 12.

and the Danish excavations have recently produced a magnificent series from Vroulia.⁸⁰ Very few pieces of classical *bucchero* have been found in Greece, and none of certain mainland fabric.⁸¹ The survival of so primitive a type of pottery among the progressive Ionian wares shows how deeply the *bucchero* tradition was established in Asia Minor; and the situation of the most flourishing Greek fabric in the south-west corner of that country is significant of its manufacture in prehistoric times.

The finest red wares of our district are those of Cyprus and Syria, if a large class of pottery formerly called Cypriote really belongs to the mainland. Egypt has produced the brilliant particoloured vases, the best examples of their kind and conclusive arguments for the essential unity of all this pottery, whether red or black. In Asia Minor the black colour predominates. The site of next importance after Hissarlik is the necropolis at Yortan in Mysia, where by far the greater number of the vases excavated by Gaudin were black but red examples formed a small parallel series.⁸² Similar material was obtained by Koerte from a tumulus at Bas-suyuk in Phrygia, with some black and brown particoloured vases which may have been intentionally decorative.⁸³ Evidence from the south has recently been supplied by Ormerod, who collected in Pisidia many vases of the same forms as those from Mysia and Phrygia, but with an increased proportion of red wares.⁸⁴ All the material demonstrates the fact that a single type of pottery was in vogue throughout western Asia Minor, as in Cyprus, Syria, and Egypt, and that the black or red colour, broadly determined by climatic environment, varied to some extent with the period and locality. Most of the Asiatic pottery is of simple type and very early date. The long series from Hissarlik, the only site which has been thoroughly explored, clearly exhibits the evolution of fine *bucchero* from the primitive black ware, and illustrates the modification of this fabric by the progress and exigencies of technique. Poppelreuter and Hubert Schmidt have already summarised the development of Trojan pottery as it appears in their arrangement of the successive periods in the Museum für Völkerkunde at Berlin.⁸⁵ I have abridged Schmidt's excellent account.

In the vases of the First City the usual effects of imperfect firing are visible: dark grey-brown clay discoloured by flame and smoke. Yet even here there is an advance to polished black and gray wares with some isolated pieces of bright red surface. The pottery of the next four Cities (II-V) was not separated by Schliemann in the order of stratification, and the

Prehistoric
Pottery of
Asia Minor

Trojan Pottery

⁸⁰ See Kinch, *Excavations de Vroulia*, p. 174: "*vasques minoïques*" (coloured reproductions).

⁸¹ Many grey pieces may owe their colour to later burning, especially small vases, such as the Protocorinthian. See the account of pottery found by Wace and Thompson in Early Iron Age cremation burials at Hislop (*B.S.A.* xviii, p. 21).

⁸² *Comptes Rendus de l'Acad.* 1901, p.

215.

⁸³ *Arch. Mit.* xxiv, p. 21.

⁸⁴ *B.S.A.* xvi, p. 89; xviii, p. 50, Pls. V-VII.

⁸⁵ Poppelreuter in *Arch. Anzeiger*, 1896, p. 105; Schmidt in *Troja und Ilion*, I, pp. 243 ff., and Schliemann's *Sammlung trojanischer Altertümer* (Berlin, 1902).

sequence has been restored from stylistic evidence. The earliest examples of the group show a decadence in comparison with the final products of the First City which has provoked the theory of a 'new race.' It is indeed a new beginning, and some fresh elements appear. Perhaps there was a set-back in ceramic art following the introduction of metal-working, such as has been recognised at the beginning of the Bronze Age in Crete. From this point however there is unbroken progress. The invention of the wheel is soon apparent in better shapes and surface, and of the kiln in more even colouring, which ranges from grey to more frequent yellow and red. The first traces of the clear grey colour, which grows more and more in popularity, are observed in this middle period of Cities II to V. Schmidt also notices 'a persistent effort to produce bright red.' But the properties of the local clay prevailed, and in the third period the red pottery is rivalled by grey or grey-black ware with improved burnish. This culminates in the silver-grey *bucchero* of the Sixth City. The red fabric, temporarily brought into favour by the invention of the kiln, is scarcely seen at all in the latest prehistoric settlements. Schmidt notes as the characteristic features of the pottery of the Sixth City that it shows 'on the one hand the highest point of development of the native fabric, on the other hand a strong influence of Mycenaean art.' The perfected native pottery is identical with the Minyan ware of Greece. The Minoan or Mycenaean pottery was of course imported, and its style ranges over a very long period. Mycenaean shapes were also copied in Trojan technique, but some of the 'Minyan' pieces, notably the ringed-stem goblets, have hitherto been included in this class. Other new elements in the pottery of City VI which should be mentioned are the plastic and incised decoration, for their remarkable character is apt to convey a false idea that these are typical features of Trojan pottery. Modelling and engraving were commonly practised in the Second City, but the succeeding periods show a growing preference for plain wares of fine form and surface. The animal heads which form the plastic ornament in the Sixth City are grotesque, but executed in fine Trojan pottery, and the graceful *Wellenband*, which represents the best achievement of incised decoration, was also applied to good grey *bucchero*. Whatever may have been their origin, neither of these innovations was a serious disturbance of the native art, such as is represented in the wholly barbarous *Buckelkeramik* of the Seventh City. Neither the plastic nor the incised ware of Troy VI has been found in Greece, and it seems that both were contemporary with the Mycenaean Age, when the Minyan pottery was also confined to Asia. They must belong to the later periods of the Sixth City. The *Wellenband* is most likely an engraved imitation of Mycenaean lustrous paint. These abnormal Trojan styles are therefore too late to interest us here, but it is useful to note that their technique is still the same as that of the earlier and normal fabrics. Grey clay is the rule at Troy from the very beginning: when the surface is fired yellow, brown, or even red the clay beneath is usually grey. It was probably grey in its raw state, as many clays are, firing yellow in contact with the air. In

his paper on the imaginary Attic fabric 'à figures grises'⁶⁶ Marguerite - de la Charlonie quotes a geological report by de Lannay: 'Les formations de *Egates* recouvertes par des argiles plus ou moins noires sont très fréquentes dans la mer Égée, notamment dans l'Éubée, à Koumi, à Lemnos, à Imbros, aux Dardanelles.' It will be useful to obtain precise location of the Trojan beds and samples of their clay, which must have very special character.

The Minyan shapes equally belong to Troy, and reached the mature forms in which they appear in Greece by long descent from the earliest settlements at Hisarlik. I have referred to Schmidt's derivation of the 'Argive Minyan' bowl from the primitive saucer of Troy I by the addition of handles, base, and the decorative profile which comes through the use of the wheel and the imitation of metal models (p. 133). The high stem which makes this bowl into the 'Minyan goblet' does not appear before the Sixth City; but there is no reason to suppose that the addition was made in Greece and came from there to Troy. It was more probably derived from an Asiatic source. Great numbers of the same type of goblet, even with the beginnings of ribbed moulding on the stem, have just been found at Carchemish in Hittite graves of the Early Bronze Age.⁶⁷ The form was wide-spread, occurring also among Iberian vases in Spain,⁶⁸ but it has only appeared in Greece with Minyan ware. The curved foot, like Schliemann's pieces from Mycenae, begins with the First City at Troy (Fig. 9), and is a frequent adjunct to various forms of cup in the succeeding periods.

But the characteristic mark of Trojan pottery is the high-swung handle which distinguishes the Minyan cups (Figs. 3-5). It appears in ungainly form in the Second City, and is gradually refined from the heavy roll to the light hand-handle of the Sixth City, while the general type remains unchanged. Schliemann was so impressed by this curious feature that he called the Trojan cup of every shape and period as Homer's *Σέρας ἀμφικύπελλον*, whether he met it in Asia or in Greece.⁶⁹ Examples of the convex form of cup (Figs. 4, 5) are so numerous throughout the Trojan series that I need only refer to Schmidt's illustrations of them.⁷⁰ But I will take the hollow shape, which is common in Greece (Fig. 13), but has not yet been recognised in its fully developed form at Troy, and illustrate its pedigree through Cities II to V (Fig. 12). The distinctive feature of this vase is the sharp division in the body, which follows a metallic pattern, the original being constructed in two separate parts. I have already illustrated

⁶⁶ *Rev. des Ét. grecques*, 1907, p. 357. The 'gray-figures' Attic came not simply burnt red-figures. Bouts of dry and green wood, even with consecutive addition of 'marcasse de résine et de grès', are poor imitations of a typical pyre. The duration of this experiment is not recorded. Moreover ancient pots were accidentally burnt in hotter fires and thereby reducing atmosphere which would be

costly to reproduce.

⁶⁷ Woolley in *Liverpool Annals*, 1914, p. 89, Pl. 22; Hogarth in *Illustrated London News*, January 24, 1914.

⁶⁸ *Excavaciones de Numancia*, Pl. XXVI. D.

⁶⁹ *Ibid.*, pp. 269, 464, 532, etc.; *Mycenae*, pp. 116, 331.

⁷⁰ Schliemann *Sammlung*; see Note 26 above.

the gold specimen, contemporary with the latest form, from the Fourth Grave at Mycenae (Fig. 1, α).



FIG. 11.—SILVER VASE FROM TROY (SECOND CITY).

The earliest model is a silver vase from the Second City at Troy (Fig. 11).²¹ The connexion can be seen without the intermediate links in pottery. The original form is common in the vases of Yortan as well as at Hisarlik, and is therefore typical of Asia Minor. The material of the Trojan prototype also explains the perfection of burnished gray *bucchero* in this particular shape, which is simply the ceramic reproduction of a silver cup.



FIG. 12.—TROJAN POTTERY (CITIES II-V).

The similarities of Minyan and Trojan wares have served to establish their common origin. The differences will be important for fixing the date of their adoption in Greece. No immature stages of Trojan forms have yet been found on Greek sites, and the *bucchero* technique is perfect. The Trojan shapes were always simple, but a sure index of date is seen in the form of the handle. In Greece this is always the flat band, which occurs so rarely before the Sixth City at Troy that it may fairly be accepted as a mark of that settlement. No roll-handle has yet been noted in the Greek material, but at Troy, where the bulk of the pottery belongs to Cities II to V, this is preponderant. The bowl with fluted lip and the ribbed-stem goblet are also not represented before the Sixth City. It must however be remembered that the pottery from Schliemann's excavation is comparatively scanty. Perhaps the later finds,



FIG. 13.—MINYAN CUP FROM ATHENS.

Schliemann's excavation is comparatively scanty. Perhaps the later finds,

²¹ *Travaux de la Mission*, Fig. 251; *A.R.* 5872. One handle is restored in the drawing.

which are now in Constantinople, contain more numerous parallels. But the Berlin collections are sufficient to show that the technique and forms of Minyan vases in Greece begin with the establishment of the Sixth City at Hissarlik, and go back very little if at all before that time.

I have repeated what has often been said before, that *hauchero* was the native pottery of western Asia Minor, and have shown that this peculiar grey fabric, with its distinctive shapes, was perfected in the prehistoric period at Troy. From the presence of the same pottery at a corresponding time on the Greek mainland it might perhaps be thought, notwithstanding its absolute identity with the Trojan fabric, that this ware was evolved on both sides of the Aegean Sea. But while excavations have failed to reveal the earlier stages of Minyan ware in Greece, they have also shown that there is little possibility of its development among the native fabrics. The discoveries in central and southern Greece have been thoroughly examined by Wace and Thompson⁷² in connexion with their own results in Thessaly, but a broad review of all the material must be given here in order to fix the position of Minyan ware.

Prehistoric
Pottery of
Greece

The chief contribution which the exploration of Thessaly has made to the general history of Greece is to isolate the south of the peninsula from the continent of Europe during the whole of its Bronze Age by a gulf of neolithic culture. If overland penetration is blocked, all foreign influences being introduced by sea will tend to be of distinct character and sudden appearance, and its origin should the more easily be traced. It is very necessary to appreciate the contrast between the prehistoric and classical Greek worlds in the complete absence during the former period of the uniformity of culture which distinguished the latter. The Aegean Sea supported a different style of art in every considerable island. The earliest vases of Siphnos, Syra, Melos, Crete are quite distinct from one another, and even when the Minyan Empire had embraced the neighbouring islands, the local fabrics preserved their individuality beside the superior style. The coasts were more widely separated than the islands. On the Asiatic shore there seems to have existed a homogeneous art in unequal development, but the European side was divided by a variety of independent cultures, which I will shortly enumerate.

Local Isolation

Two neolithic civilisations had decayed in northern Greece before the Bronze Age was imposed upon this region by southern invaders.⁷³ The first of these, which extended from the borders of Macedonia to mid-Bœotia or even to the Corinthian Gulf, was aboriginal, for its art is unlike that of any contemporary culture. It produced finer pottery than any other Stone Age which is known, revealing better technique than the early Bronze Age wares of Crete. The characteristic pottery is a painted fabric with bright red patterns on a lustrous white slip, which appears on every site.

North Greece

⁷² *Prehistoric Thessaly*, Cap. xii. etc.

⁷³ The evidence has been exhaustively published by Wace and Thompson in *Prehistoric*

Thessaly (1912), mostly from their own excavations.

but varies the type of its geometric designs in different localities. In Boeotia a thin linear style was prevalent.⁷⁴ With the painted fabric are plain wares of equally good technique. A thin red pottery is found in Thessaly, polished black *bucchero*⁷⁵ with curious plastic decoration on Boeotian sites. At a later stage of the First Neolithic Period a fine grey *bucchero*⁷⁶ was made in Thessaly. These are the only North Greek fabrics, before the actual imitations, which bear any sort of likeness to Minyan ware, but a connexion in either case is impossible, for both were extinct long before Minyan ware appeared, and the grey fabric, which alone approaches the technique, was confined to northern sites in Thessaly, its thin square forms belong to the native Thessalian group, as do also the delicate patterns with which it was painted in some colour now flaked off or faded, and it shows no affinity with the heavy plastic pottery of Throe and Asia. In the Second Neolithic Period a new culture flourished in central Thessaly near the Pegasus Gulf. Its painted pottery, 'Dimini ware,'⁷⁷ is akin to certain neolithic wares of central Europe which have been found at present in Transylvania, Galicia, and South Russia, and it was undoubtedly imported into Thessaly, coming from the north perhaps by sea. This foreign influence did not penetrate to the south of Othrys, and elsewhere in Thessaly, in north, west, and south, the native culture was hardly disturbed by the intrusion. In the Third Neolithic Period all the styles of pottery show continuous degeneration through linear geometric wares until no painted fabrics of any sort appear. The native pottery of the Fourth Period is of the most primitive type, a mass of plain coarse fabrics, amongst which Minyan ware, appearing frequently in burials and settlements of this date, is plainly marked as an importation. Coarse local imitations of Minyan ware are also found. Mycenaean pottery coming later still demonstrates the chronological relation of the underlying strata to the Aegean Bronze Age.

In Greece proper two distinctive kinds of pre-Mycenaean pottery besides Minyan ware have been found, both of which for want of equivalent translation must retain their descriptive German names: *Urfrühe* and *Mittelmateres*. There are of course the nondescript rough wares which may belong to any age or are definitely known by their context to be early; such are the incised shards from the Heraeum at Argos which Wace and Thompson would assign to the classical period,⁷⁸ some from the Acropolis at Athens which have been described as 'Trojan,'⁷⁹ and the rough wares which Vollgraff found with Minyan on the Aspis. These have not risen above the universal level of primitive art, and have no comparative value. They might

⁷⁴ *Proc. Thessaly*, p. 14 (A 3 B), p. 193, fig. 140 (Chironce).

⁷⁵ *Op. cit.* p. 15 (A 3 C).

⁷⁶ *Op. cit.* p. 17 (C 1 B).

⁷⁷ *Op. cit.* p. 10 (B 2 a, Pl. 1; coloured reproductions also in *Antiquities of Thessaly*, Pls. VII–X.

⁷⁸ *Proc. Thessaly*, p. 222.

⁷⁹ *Atrop. Fauna*, 1, p. 1; *Parthenon, Diglossa Genter*, p. 76. One of these shards (B) may actually be Trojan, showing the distinctive *Wilkesian* ornament of Oides VI–VII, but it is red, not grey. The others, if not local, are likely to be Cycladic.

of course have developed in Greece as they did in Asia, but the present evidence indicates that they did not do so, and there could hardly be a parallel evolution of form without connexion.

Urfirnis is a primitive varnished ware of good quality. The clay is fine, ^{extreme} light reddish in colour, and the smooth surface is painted with a wash varying in density from lustrous black to transparent brown in which the brush-marks are plainly visible. The shapes are elaborate and the ware is thin, though it is said to be hand-made. The *askos* and a boat-shaped vase are common forms. It is being found in large quantities at Tiryns, where it forms the lowest stratum, underneath the Mycenaean palaces.⁴⁰ Its northern limit as at present known is Lamakhlidi in the Spercheios valley, though sherds have been found so far north as Thaini in Thessaly.⁴¹ In Phocis and Boeotia a kindred ware has also been found with inferior black varnish and simple patterns in white paint.⁴² This may be a later form. In the Cycladic islands *Urfirnis* occurs at a very early date beside the local fabrics, notably at Phylakopi in Melos⁴³ and at Chalandriani in Syra.⁴⁴ The obvious source of this pottery is Crete, for it is a sometimes not inferior form of the earliest Kamares ware. But the Cretan influence, if represented, was evidently discontinued, since the forms are different, the black wash does not possess the Kamares brilliance, very rarely bears white patterns, and never shows the polychrome decoration which was soon applied in Crete (M. M. I.). The borrowing must therefore have taken place in the Early Minoan period, and this date is supported by the relation of *Urfirnis* to Cycladic fabrics in Melos and Syra. It occurs in the First City at Phylakopi. If it came to Tiryns through the Cyclades, Minoan pottery and other products should be found with it, but this is not the case. There is of course the possibility that it belongs to some other island; but whatever its origin, it seems to have been a local fabric in the Argolid, perhaps representing an early Cretan contact. From the south it ultimately spread northwards through Boeotia as far as the Spercheios. Differences have been noticed in the northern form which may be due to later date as well as local conditions. There is no evidence yet to prove the stage of civilisation to which *Urfirnis* belonged, but the certain Cycladic contact suggests that this was already the Bronze Age.

Mattmalerei was so called by Furtwängler and Loeschke to ^{distinguish} distinguish it from the lustrous Mycenaean pottery.⁴⁵ Subsequent excavations have shown that it is not a variety of Mycenaean ware at all, but belongs to the preceding period on the mainland of Greece, the material from the Shaft-Graves at Mycenae representing the overlap of the two cultures. It is widely distributed, having been found in Attica chiefly at Aphidna,⁴⁶ Eleusis,⁴⁷ and

⁴⁰ *Ath. Mitt.* 1913, p. 82.

⁴¹ *Proc. Thessaly*, pp. 145, 178, Figs. 122-124.

⁴² *Proc. Thessaly*, p. 194; *Bull. des Épigraphes*, 1912, p. 270 (H. Marica).

⁴³ *Phylakopi*, pp. 86, 248; *B.S.A.* xvi, p. 16.

⁴⁴ *Ep. 'Aex.* 1899, p. 93, Pl. 2.

⁴⁵ *Myk. Forsch.*, p. vi.

⁴⁶ *Ath. Mitt.* 1886, p. 335, Pl. XV.

⁴⁷ *Ep. 'Aex.* 1899, p. 31; 1912, p. 1.

Athens,⁸⁸ in Megaris⁸⁹ and Aigina,⁹⁰ at Mycenae,⁹¹ Tiryns,⁹² and the Argive Heraeum,⁹³ in small quantities at Orchomenos⁹⁴ and Thebes⁹⁵ in Boeotia and at Geraki in Laconia,⁹⁶ and in abundance on the Aspis hill at Argos.⁹⁷ On nearly every site it is associated with Minyan ware, so that these two fabrics were contemporary, both belonging to the Bronze Age. The name very well describes the appearance of the pottery, which is dull throughout. The clay is palest yellow verging on greenish white, coarse and sandy in substance, with smoother but still porous surface, on which geometric patterns are painted in dull black colour. The decoration is simple. Vertical division predominates: the frequent scheme of long panels crossed by diagonal bands suggests derivation from protective roping of the original vessel. The shapes are as primitive as the ornament, mostly consisting of shallow bowls and wide-mouthed store-jars with pointed base. Exact analogies in fabric, form, and decoration are found in the Middle Cycladic pottery of Melos⁹⁸ and there can be no doubt that *Mattmalerei* represents influence from that source. It would be impossible to distinguish some Cycladic pieces from those of Aigina or Argos, but as a rule the Melian clay is even coarser, darker yellow, and has a surface slip. But, as with the earlier *Urfirnis*, there is no sign of continual foreign contact. No mainland examples show the naturalistic decoration which Melian pottery soon affected, but the primitive schemes persisted throughout its history, or developed, as in one variety at Argos, to a more elaborate geometric style. It must be admitted that *Mattmalerei*, like other native fabrics, is a poor sort of pottery. The extreme porosity of the clay renders the vessel useless for holding liquids. One is immediately reminded of the water-coolers which are sold in Aigina at the present time, for they are made of similar open greenish clay, and it seems likely from the distribution of the prehistoric pottery that this island was an important centre of fabrication. The clay of the Argive plain has the same pale colour, and the deep deposit of this pottery on the Aspis points to a local fabric there. It must be noted that there are two varieties of *Mattmalerei* at Argos. Beside the usual coarse ware Vollgraff found a delicate fabric of fine clay with polished surface and a novel system of minute geometric ornament. This miniature Argive fabric is the prehistoric ancestor of Protocorinthian pottery, the descent of which may be clearly seen in the intervening Argive fabrics of Mycenaean and 'Dipylon Geometric' wares. These are the only distinct types of pottery, besides Minyan ware, which have yet been found in the parts of Greece where Mycenaean culture afterwards flourished. Both belong to districts which were most exposed to influence from the progressive art of the Aegean islands, and both appear in fact to owe more to foreign contact than to native invention.

⁸⁸ *Aérop. Foues*, I. Pl. I.

⁸⁹ *Arch. Mit.* 1904, p. 95.

⁹⁰ *Ép. 'Apx.* 1895, p. 225, Pl. X.; 1910, p. 177.

⁹¹ *Mys. Thorap.* p. 2.

⁹² *Arch. Mit.* 1915, p. 52.

⁹³ *Argive Heraeum*, II. p. 72.

⁹⁴ *Orchomenos*, I. p. 6.

⁹⁵ *Ép. 'Apx.* 1910, p. 221.

⁹⁶ *B.S.A.* xvi. p. 72.

⁹⁷ *B.C.H.* 1906, p. 52.

⁹⁸ *Phylakopi*, Pl. VII etc.

In the extreme south and west there appears to have been no foreign intrusion before the Late Minoan period, and coarse local pottery of that date is found, as in Thessaly, beside the superior imported wares. At Geraki in Laconia such primitive fabrics were found with *Malthakares*, and may therefore belong to the period preceding the Mycenaean.⁹⁸ The condition of Western Greece as a whole is revealed by Dörpfeld's discoveries beneath the Altis at Olympia.⁹⁹ These are the remains of several houses which were destroyed and covered with a bed of sand to make a level floor for the precinct. A sherd of Late Mycenaean pottery, buried under a floor in conditions which preclude the possibility of later penetration, proves that the settlement was later than the Mycenaean Age; and it seems likely from the circumstances and the objects found that it was very little earlier than the foundation of Olympia, having been in fact destroyed for that occasion. But in spite of the advanced date, numerous stone implements were found in the houses, and most of the vases, which imitate mature metallic forms, were made by hand and burnt in an open fire; that is, they are local copies of foreign models.¹⁰⁰ Similar evidence comes from the much earlier contact of Minoan and native cultures at Kakóvatos (Pelos),¹⁰¹ and from discoveries of Stone Age settlements in Aetolia, Leukas, and elsewhere.¹⁰² The native populations preserved their primitive independence until a foreign invasion brought the sudden use of bronze, and at Olympia probably of iron. The conditions are repeated to-day in Australia, where the neolithic native chips improved stone axes from bottle-glass and telegraph-insulators, and adapts steel blades to the same primitive type from barrel-hoop and broken sheep-shears.¹⁰³

South and West
Greece

It is hardly necessary to examine Crete in seeking an alternative origin for Minyan ware. The history of Minoan pottery is perfectly well known down to the time when Cretan culture was imposed upon the rest of Greece (L.M.I. = c. 1600 B.C.). *Bucchoero* was made in Crete as in most other centres, but was soon displaced by the black Kamarese enamel (E.M.III.). A grey fabric is fairly common in the Early Minoan periods, and an elaborately incised form seems to be an archaistic reminiscence of the neolithic pottery.¹⁰⁴ Cretan *bucchoero* appears again among the many fabrics at the beginning of the Late Minoan period, but at every time the shapes were entirely different from Minyan, and Minyan ware has not been found in Crete. We have seen that it occurs as an obvious importation in Melos, and it is unlikely that such pottery originated in any of the northern islands, though it will certainly be found there. A parallel development would prove that the island belonged

Crete

⁹⁸ *B.S.A.* xvi, p. 72. Some monochrome sherds seem to show Minyan influence.

⁹⁹ Published by Weege in *Arch. Rev.* 1913, p. 163.

¹⁰⁰ Weege points out that some of the originals must have been practically identical with North Italian pottery from the Terramare settlements. Others would find closer parallels in the Villanova fabrics. These are probably the

earliest 'Hellenic' documents that we have.

¹⁰¹ *Arch. Mit.* 1909, p. 250.

¹⁰² The vases are collected in *Proc. Thessaly*, esp. xlii.

¹⁰³ Specimens in the British Museum and elsewhere; B.M. *Illustrated to Ethnographical Collections* (1910), p. 111, Pl. V.

¹⁰⁴ Harriet Borch, *Greece*, p. 59, Pl. XII. (Vasiliki).

to Asia from the beginning. A southern Asiatic origin, in Cyprus or Syria, or in Egypt, is of course impossible.

Importations of
Minyan Ware

Minyan pottery must therefore have been introduced into Greece from Troy. The question now arises, How much of it was actually made in Greece? For the answer I can bring no evidence, but only an inconclusive balancing of probabilities. It is the grey *bucchero* that causes hesitation, for the inferior monochrome wares do not occur at Troy, vary with different sites elsewhere, and are therefore local fabrics. At first it seems unlikely that there would have been extensive carriage of pottery across the sea, and it is far more unlikely that *bucchero* was ever shipped to Asia. But this was the best pottery of its day in Greece, and a cheap substitute, as we have seen, for silver. It is significant too that Minyan vases are all cups. Where are the jugs and jugs? They have been found in normal quantities at Troy, but not in Greece. Vollgraff illustrates a unique handle of a large *oinochoe* in red-brown ware from the Aspis, and mentions a *pithos* in this fabric and a grey fragment. The Orchomenos finds should contain more, for some sort of jug must have been in use. At Argos and in southern districts the native *Mattmalerei* seems to have supplied such utensils. But the present evidence is that the larger Trojan vases hardly got to Greece at all, apparently because they were not so attractive in shape or fabric as the metallic cups. This selection of forms looks like importation, for if any Trojan pottery could be made in Greece without actual models, all might have been. So with technique: the imitative red or black wares, which form by far the greater part of the Greek material, would not exist if the superior grey *bucchero* could have been made locally. The relative proportions on the Aspis were in this order: red and brown, *Mattmalerei*, black, grey *bucchero*,—the simple native fabrics in greatest quantity, closer imitations next, and the standard fabric least of all. But however remarkable the Trojan clay may be, it would be unsafe to argue that fine Minyan ware could not be made in Greece, for clay is the commonest of natural products. It is worth while to examine the pottery of historical date for parallel fabrics. In Boeotia, where Minyan ware is chiefly found, the clay is notoriously bad, coarse, and chalky.¹⁰⁰ Attic clay is good, but equally unsuitable for burnished grey ware, being highly ferruginous and not fatty. There is only one clay in the later vases which would give the required result with proper handling: that of the Argive Plain, from which the soft yellow Protocorinthian and Corinthian fabrics were made. The unsuitability of other Greek clays can be seen in the numerous inferior imitations of Corinthian ware. The fine variety of *Mattmalerei* from the Aspis (above p. 150) shows that this clay was worked before the Mycenaean Age. But was the process of reduction understood? If so, it was very sparingly applied. Corinthian clay was seldom or never used for *bucchero* in later times, and a strong argument against its use for Minyan ware is the small proportion of fine grey pieces in the Aspis pottery. If this was made at all in Greece it must have been at Argos; but Orchomenos

¹⁰⁰ Wille in *Zeitschrift*, 1859, p. 78 ('Geometrische Vasen aus Griechenland').

seems rather to have been the centre of distribution, and the locality favours importation by sea. For the present I am inclined to think that the standard 'Minyan' *bucchero* was only made at Troy. In any case it is not of immediate importance to identify the place of manufacture, if the Asiatic connexion of the pottery is sufficiently established.

The paucity of shapes, if confirmed by the material from Orchomenos and future finds, will be useful for estimating the degree of Trojan influence which the pottery represents. These cups cannot possibly have come to Greece by trade, for apart from evidence against such commerce, their distribution and association with domestic and sepulchral remains on many sites show that they were brought and used by a foreign people. The succeeding Mycenaean pottery was not only introduced in complete form, but soon developed style and fabric which differ from the contemporary Minoan, and were ultimately carried back to Crete. But the Mycenaean power in Greece was secured by a permanent migration. The Trojan, though extensive, seems to have been less than that; rather a colony or military occupation.

It only remains to find the relation of Minyan ware to the other mainland fabrics. Most fortunately these are all brought together at the central site of Orchomenos. This city has now been excavated to the rock, and four prehistoric strata are distinguished in its remains.¹⁹⁷

Stratification
at Orchomenos

I. [*Rundleutenschicht*]. The pottery of the First (lowest) Stratum is of two kinds: polished monochrome ware, red, brown or black, and a painted fabric with red linear patterns on white slip. The black pottery, which is most plentiful here, is the peculiar fabric which has already been mentioned (p. 148): a very thin fine *bucchero* decorated with small knobs applied in simple patterns. It occurs on neighbouring sites, the farthest to the north being Drachmani (Elateia), but has not yet been found south of Orchomenos. The red-on-white painted fabric also represents the southern limit of North Greek Neolithic culture. It belongs to the homogeneous group which extends all over Thessaly and was no doubt aboriginal. Architectural remains were scanty at Orchomenos, but enough to show that the type of house was circular with lower courses of stone and superstructure of mud brick. An iron nail and a modern Greek shoe from the very bottom of this neolithic deposit provide a useful check in the scientific valuation of isolated finds.

II. [*Bothroschicht*]. The Second Stratum derives its name from the architectural peculiarity of deep pits sunk in the house-floors. Their purpose is not known; their effect has been to mix the pottery of this stratum with the remains of the previous settlement. This pottery is the varnished ware called *Dryfonic*. Remains of houses show an elliptical ground-plan, and several periods of construction.

¹⁹⁷ My account is a very short summary of Balle's report in *Orchomenos I.*

III. [*Adelermynkenisch*]. The reason given for the German name is that this Third Stratum appears to be contemporary with the shaft-graves of Mycenae. The end of it did no doubt approach that point of time. Its pottery is Minyan ware. Other new features are rectangular houses with several small rooms, and crouching burials (*Hockergräber*) in and between the houses. The deposit is both wider and deeper than those of the preceding settlements. In one spot, where the Neolithic and *Urfirnis* cities are not represented, no less than ten successive building levels in a depth of twelve feet testify to the long duration of the 'Minyan' settlement. Three main periods were distinguished in these levels, during which the houses show improvement in size, strength, and regularity; but no degrees of progress could be observed in the pottery, which appears at first in the last stage of development. In relation to the preceding stratum, Bulle found 'the change in all respects so complete that here too a new occupation by an alien race must be recognised. Moreover the accumulation from destroyed mud walls in the *Bothroschicht* [II.] is at several points so high that it points to violent destruction and resettlement; while in obvious contrast the several periods of the *Adelermynkenisch* stratum [III.] produce levels of much slighter bulk, which at times run into one another and so indicate a peaceful and uninterrupted occupation.'

IV. [*Jüngermykenisch*]. The Mycenaean Stratum. This lies immediately below the present surface of the ground, and is half to three-quarters of a metre thick. Its pottery is ordinary Mycenaean ware with a large proportion of monochrome sherds. No remains of buildings have been found, but good pieces of painted wall decoration show the importance of the Mycenaean city, which the neighbouring *thebes* tomb would otherwise suggest. The value of this stratum is that it gives the chronological relation of Minyan to Mycenaean pottery. The latter is too scanty to show by its style the exact time of the change of culture; but it is important to note that Thebes has produced some of the earliest Mycenaean vases that are known.¹⁰⁰ The bee-hive tomb of Orchomenos with its fine ceiling suggests a date contemporary with the first occupation of Mycenae.

The historical significance of these discoveries need hardly be explained. The earliest civilisation in Greece was the Stone Age culture of Thessaly, which extended as far south as Copais. This was aboriginal and untouched by foreign influence. Another culture was established about the same time in the Peloponnese, where its black-washed pottery (*Urfirnis*) forms the earliest stratum on the rock of Tiryns. This Argive culture may have been originally derived from Crete; it was certainly in contact, direct or indirect, with the Cyclades, and may therefore have known the use of bronze. Its beginning can be dated by the Cycladic contacts in the Early Minyan period of Crete (*c.* 2500 B.C.). The next event was the northern advance of the southern power. It thrust the neolithic natives from Orchomenos, and occupied their city, penetrating as far as Lianokladi in the Spercheios valley.¹⁰¹

¹⁰⁰ *Asi.* *Rec.* 1912, p. 226, Pl. VII-E.

¹⁰¹ *Prehistoric Thessaly*, p. 177.

where the sequence of strata exactly agrees with that of Orchomenos; but Thessaly, like Western Greece, continued to enjoy its Stone Age. The date of the Second City at Orchomenos cannot yet be fixed, but it must have begun before 2000 B.C., and its duration was considerable. It was ended in its turn by the intrusion of a hostile power, which Minyan pottery shows to have come from Troy. The Asiatic conquest was complete, for the new *bucchero* succeeds *Urfirnis* on every site, spreading, apparently from Orchomenos, to Lianokladi, Zevgolia, Dimini, and farther north in Thessaly, and southwards through Attica to Aigina and the Argolid, where a new settlement was founded on the Aspis. Here may be the origin of 'Cyclopean' fortress-walls. It is probable that the beginning of the change is dated by the earliest Minyan contact in the Cyclades: Melos was then protected by the Cretan power, and it is likely that the Minyan pottery came there from Crete. If Minyan ware came to an end soon after the Minoan invasion (L. M. I. = c. 1600 B.C.), the beginning of an occupation which is represented by ten building levels at Orchomenos must go well back into the Middle Minoan period. This agrees with the evidence from Phylakopi,¹⁰⁸ where three-quarters of the Minyan pottery recently found occurred with Cretan Kamites ware (M. M. II. begins c. 2000 B.C.). It would coincide with the beginning of the Sixth City at Hisarlik, when the mature stage of native pottery appears to have been reached. On the mainland *Urfirnis* pottery was no more heard of, but a dull painted fabric, adapted from Cycladic art, flourished in south-east Greece by the side of the foreign *bucchero*. Both kinds of pottery have been found abundantly at Argos and in Aigina: at Orchomenos *Mattmalerei* is rare.

Chronology

The prolonged Asiatic occupation was broken by the Minoan attack, first in the Argolid where the fortresses of Mycenae and Tiryns were taken, then at Orchomenos and in the north. Simultaneous Minoan landings at Pylos and no doubt elsewhere, and early expansion to advanced positions, such as Paganis¹⁰⁹ and Rhodes, enlarged the Mycenaean realm, and began to unite the whole of Greece in a uniform civilisation. The shaft-graves at Mycenae mark the meeting of the powers: Trojan pottery and gold lay there side by side with Cretan and Cycladic treasures.

The last phase has been revealed at Troy. The Sixth City, wrongly called Mycenaean, shows a purely native culture with considerable Minoan contact. It was of very long duration, and contemporary in its later period with the Mycenaean occupation of Greece. If that event was the conquest of a Trojan province, subsequent relations across the Aegean could only have been hostile. Agamemnon's Trojan Expedition begins to appear as a rational and even necessary undertaking. Troy was sacked by the Achaeans, who certainly possessed the Mycenaean power, and they appear to have desired only the destruction of the town, for there is no trace of a considerable Aegaeon settlement on the site. Sub-Mycenaean sherds are common in the

Greece and Asia

¹⁰⁸ *J.S.A.* xvi. p. 17.

¹⁰⁹ *Arch. Med.* 1939, p. 262: tombs containing very early Mycenaean pottery.

Seventh City, and doubtless represent the pottery of the conquerors. The traditional date of 1184 B.C. for the sack of Troy cannot be far wrong. The great result appears to have been the foundation of the Ionian colonies. Hogarth has suggested that the remarkable failure of the Mycenaeans to get a foothold on the further Aegean shore was due to the resistance of an Asiatic power.¹¹¹ The new evidence extends his argument: the absence of Minoan influence from the Greek mainland during the pre-Mycenean period, like the no less significant absence of Minyan ware from Crete, was due to the hostility of the same Asiatic power in Greece. That this power, the natural enemy of the Minoan and then of the Mycenaean state, had its most formidable post at Troy, is established by literary as well as archaeological record. Its origin and extent in Asia are not yet known.

Greece then was occupied by Asiatics before the Mycenaean Age. The conclusion is not surprising, for Aegean history displays an endless struggle for the possession of both shores, and it is the sea rather than the continent that determines the political control. The latest transference is now in progress: the first recedes far back into the middle Bronze Age. The learned Persians after all were right, Herodotus would agree, καὶ τὸν ἁδισσημάτων πρῶτον τοῦτο ἀρξαι. What light these facts will throw upon racial and economic questions, Minyans, Pelasgians, or trade-routes, will, I hope, be discussed by others. It is anyhow beyond the scope of a paper which seeks only to present one part of the archaeological evidence.

E. J. FORSDYKE

¹¹¹ *Ionia and the East*, p. 47.

NOTICES OF BOOKS.

Auswahl archaischer Marmorskulpturen im Akropolismuseum. Von HANS SCHRAUER. Pp. 57, IX Plates. Wien, Alfred Hölder, 1913.

This great work, long awaited, will be eagerly welcomed not only by archaeologists but by all to whom Greek art makes any appeal. The plates and the illustrations of the text-volume are among the finest recent specimens of the art of reproduction. Type, paper, and finish—and one must resignedly add cost—are all on the scale of an *édition de luxe*. The Imperial Austrian Institute is to be congratulated warmly on the whole appearance of this beautiful volume. The illustrations include three water-colours by the Danish artist Marius Henriques and one by Gilliéron of Athens. Of these the first three are beautifully executed works of art, in which the existing colour-traces on the statues are very closely reproduced, but they contain too much of the artist's personality to give a very faithful reproduction. M. Gilliéron's sketch is of great value as a corrective to the trials enduring of the designs in Leumann's *Attische Plastik*. The photographs are the work of Rudolf Rohrer of Athens, and they were executed under Professor Schrader's personal supervision. It may be an error in taste, but we venture to assert that the excellent half-tone illustrations of the text-volume give an even better idea of these wonderful masterpieces than the more costly plates in héliogravure. All however are excellent, and the reader who is unable to visit the originals in Athens will find in this book the latest resources of photography and printing to assist his imagination. Professor Schrader's text is all too short. There is no one living who knows the *Acropolis marbles* as he does, but he has only spared us a little of his store, and put us off again with a tantalising promise of further benefits to come. In fifty-seven pages, large it is true, but considerably taken up with illustrations, he has not space in which to do more than give an admirably succinct account of a score or so of statues. In the Introduction we have an interesting digression on the reasons why the curiously individual physiognomy of the *Koai* has suggested to some critics an early form of portraiture, and an instructive picture of the growing commercial wealth of Athens under the Poinstratidae as shown by the fact that the *Acropolis votive offerings* come mainly from the middle classes. The rest of the book consists of a detailed discussion of a few individual statues or groups of statues, and the evidence which they provide for the early history of Attic art.

The most important suggestion of the book is one which will certainly meet with considerable discussion. The graceful and exotic maidens of the *Acropolis* have usually been attributed to the workings of Ionian, mainly Chian, influence on the sculptors of the court of Poinstratos, but Prof. Schrader wishes us to see in them products of Parian art. His argument in brief is that the most significant of these *Koai*, Nos. 682, 675, and 594, are themselves imitative of an archetype which he sees in No. 1360, a much mutilated torso which he has recently put together himself. This in its turn he connects closely with the *Caryatide* of the *Cnidian Treasury*, with which of course No. 682 has frequently been compared. Accepting Heberdey's theories on the *Cnidian frieze*, he sees in these figures Siphnian dedications essentially procured from the neighbouring island of Paros, which together with its marble quarries 'must have had a flourishing school of sculpture.' But for such a revolutionary theory the chain of evidence is surely weak. Heberdey's arguments about the *Cnidian frieze* are far from proven; some would hold that they have been disproved; there must be many who with the writer see in No. 1360 far more points of difference from, than of resemblance to, Nos. 681 and 594, e.g. in the skirt-folds gathered in the left hand; and we have no literary and little monumental evidence for an early school of Parian sculptors. It is even dubious if 1360 is in Parian marble, for the crystals of its material are much

larger than those of the ordinary product of the Parian quarries. Professor Schröder will have to produce more cogent evidence before his new view is commonly accepted. In another point he proves a reactionary, for he has been persuaded by Frau A. von Netolitzka to return to Kalkmann's old view that the oblique mantle of the *Kore* reaches only to the waist and therefore that the skirts of these figures belong to the *chiton* and not to the *himation*. Frau von Netolitzka's view is based on practical experiments with actual drapery, which seemed to show that certain folds and corners observable on the statues could only be produced by a short garment of this description. But assuming that these experiments in actual drapery are correct, we are still far from the desired conclusions, since the statues are full of details quite impossible in nature, but intelligible in an early stage of art. We have no more right to argue from the model that the details of drapery were so and so than we have the right to conclude from the statues that Parian maidens wore slant-eyed or had red hair. The costume of the *Kore* represents an artistic convention which cannot be pressed in detail, but it is hard to imagine a Greek artist of the first rank even in the sixth century painting the lower part of a garment with a totally different colour and with totally different border-patterns from the upper part but with the same colour and with the same border-patterns as a different garment worn above it. Besides, No. 682 provides the disproof, for in this statue we can see a small piece of the disputed garment above the girdle in the apex of the triangle formed by the mantle folds. This surface is white, not green like the upper part of the *chiton*, so that the change in colour would have to take place, according to Professor Schröder's view, not at the waist but somewhere between the waist and the neck.

One of the most valuable new suggestions of the book is that which connects the *Kore* No. 681 with the *Nike* in the pediment at Delphi, a suggestion which enables Professor Schröder to propose Antenor as the sculptor employed by the Alameonidae on their new temple front. The connexion of the seated *Athena* No. 625 with the Cutilian frieze by reason of its raised foot is also ingenious and convincing, but space precludes a more detailed appreciation of the many valuable conclusions which Prof. Schröder's intimate acquaintance with these marbles enables him to draw. In two points of fact we must differ. Professor Schröder, following Lermann, calls the *chiton* of No. 685 red. There are not many remains of colour on it. The red traces can be ascribed to the remains of the hair-colour and the red meander border, but the green stains can only belong to the original *chiton* surface. More important is the question of the date of No. 682. Professor Schröder on p. 40 writes as if this statuette had been found in the *Perseuchon*, but of course its discovery was made in the *Propylaea*, where it was found among the foundations laid down in 438. Its date is nearer 450 than 480, and the attempt to make it pre-Persean would greatly complicate the chronological development of fifth-century Attic art. In conclusion we can only repeat that this is a book of the greatest importance written by an expert whose first-hand knowledge of his subject is unique. No one, be he artist or archaeologist, will read it without sincerely hoping that Professor Schröder's labours will atone in the near future to some of the less known but no less beautiful works of what he so aptly calls the *Attic quattrocento*. G. D.

Antike Porträts. Von RICHARD DELBRÜCK. Pp. lxx, 62 Plates. Tabular in *Gesamtscholarium* VI. Bonn: Marcus und Weber, 1912. M. 12.

Dr. Richard Delbrück's work on ancient portraits will take a very high place in the literature of iconography, and among the many useful monographs of this series none deserves greater praise. We in this country may well feel envious that a book with sixty-two colotype plates of such superlative excellence, besides many half-tone illustrations in the text of almost equal value, could be produced at so moderate a price. The volume makes no claim to an exhaustive treatment of the subject. A short introduction is followed by a brief account of each plate dealing with the literature and giving a full bibliography. There is no space for a complete criticism or even for much discussion of

divergent views. Nor of course are more than a small fraction of the portraits of antiquity reproduced; but in regard to those which are dealt with most of the material for discussion is provided. The plates of coins, gems, and rinceaux at the end are of especial value. The introduction is intended rather for the amateur than for the student, and the conclusions laid down are of the generally accepted type. One may perhaps doubt whether the dedication of individual statues in temples was so much to gain the protection of the deity as to make a symbolic gift of the offerer to the divine service. Early athlete statues must have originated in this way. Dr. Döllnerick in discussing the gradual development and increase of naturalism in portraiture calls attention to the fact that idealism had not died out even in the ages of greatest realism. Thus ideal portraits of Alexander belong to the same period as masterpieces of Hellenistic individualism, and even in the later years of the Roman empire we find the two tendencies side by side. In discussing the history of Egyptian portraiture the author seems to take for granted a too regular line of development. Naturalism grew rapidly and culminated in the twelfth and eighteenth dynasties, but the later artists tended to react in the direction of convention rather than to continue on the same lines. Dr. Döllnerick's view would have greater force if we could accept his conclusion that the two splendid green basalt heads on Plates II and 12 belonged to the pure Egyptian period. But most critics will see in them works influenced by Hellenistic art. In Greek portraiture the great dividing line between idealism and naturalism comes in the fourth century with Demetrios, Silanion, and Lykasteatos. Casts and death-masks introduced a new standard of likeness. From about this time too or a little later we begin to have the great assistance of coins, gems, medallions, etc., in determining personalities. Dr. Döllnerick's position as First Secretary to the German Institute in Rome gives him access to the finest collection of gem-casts in existence, and his treatment of the gems is one of the most valuable parts of the book, though we may feel some doubt of the genuineness of a few of the specimens, especially the Aloukir gold medallions in Berlin.

Turning to the plates the greatest interest among the Egyptian group will be felt in the portraits of Akhenaten (Amenhotep IV.) the heretic Pharaoh of the eighteenth dynasty, with his wife Nefertiti, his mother Queen Ti, and the exceptionally charming head of his little daughter. Here we find a singularly fine naturalism and simplicity, which never reappear in Egyptian art. Akhenaten's daughter is one of the few Egyptian portraits before the time of Ptolemy that might for a moment seem Hellenic. The selection of Greek and Roman portraits includes the interesting though very feeble statue in Candia now identified with Herakleitos, and several heads from America of which good reproductions are very welcome. The Aristotle type shown on Plate 19 has now been established by Stelmach, but the Menander of the following plate cannot yet be said to be by any means certain. The Louvre bust on Plate 23 cannot even by a stretch of imagination be accepted as Ptolemy Soter. The hair, eyes, and expression are all those of Philadelphus. 'Amazirris' on Pl. 24 is fittingly provided with a Ω ; the type both of the coins and of the Harvard head seems to be ideal. The Berlin Attalus from Pergamon (Pl. 27) on the other hand might well be unqueried. There is no real resemblance to the Seleukos bust in Naples, while the likeness to the highly probable coin of Attalus (Wace, *J.H.S.* xiv. 1905, pp. 98, 99) is very close. There is not much resemblance between the so-called Berenice II. of Pl. 28 and the coin-portrait of the wife of Evergetes, and the head here again seems rather an ideal representation perhaps of Isis. The identification of the well-known bronze statue of the Terme with Demetrios I. of Syria is interesting and attractive. The absence of a diadem is explained by Demetrios' long exile as a hostage in Rome. The Roman list presents fewer difficulties in identification. Among the most interesting of the series are the splendid Flavian lady of Pl. 40, the fine male bust on Pl. 45, and the Athens Rheometaleos, for so long labelled Jesus Christ by the itinerant druggman. The Capitol Elagabalus, and the Terme Gallienus furnish good support for Dr. Döllnerick's claim that the third and fourth centuries A.D. are the period of greatest individualism in classical portraiture. With Constantine we begin to return to a more ideal standard, and from his time to that of

Justinian portraiture is rapidly sinking towards the hieratic formality which marks the Byzantine age. The gems and coins are excellently reproduced, but Pl. GI No. II is Eurygates and not Philadelphos. In conclusion we must express the hope that Dr. Delbrück will expand some of his identifications in greater detail. A fuller collation of gems with coins is one of the most pressing needs of iconographic study. G. D.

A Short Critical History of Architecture. By H. HEATHCOTE STATHAM.
London: B. T. Bateman.

Mr. Statham has written a clear, readable, and generally well-proportioned book. It is not easy to write a short history of a great subject which has been so often written about. In the case of Architecture, apart from the difficulties inherent in all short histories, the task of following a book so comprehensive and living as Ferguson's monumental work must be apparent to anyone who has given serious thought to the matter; and so, in recent years we have had deft foot-play and graceful sparring round the subject rather than close work and hard hitting. Mr. Reginald Blomfield has produced 'The Mistress Art,' Mr. John Belcher, 'Essentials in Architecture,' and Sir T. G. Jackson, 'Reason in Architecture'; all works dealing in a general way with the æsthetics or science of the subject, and only incidentally historical. Mr. Banister Fletcher's 'History of Architecture on the Comparative Method' has been for some years in the field, and has passed through two or three editions. Lastly, there is Prof. F. M. Simpson's 'History of Architectural Development' written for Messrs. Longman's series. Both Prof. Simpson's and Mr. Fletcher's books are, of course, histories, the former heterogeneous (though decidedly useful, the latter, the most serious contribution which has been put forward in this country since Ferguson. Prof. Lethaby's brilliant little book, recently published, is more definition of architecture than history. Mr. Statham's book, alone, professes to be a 'History of Architecture,' without any reservations except the word 'critical,' the word 'short' being merely quantitative. We take up Mr. Statham's book, therefore, feeling that we can compare it with M. Reinach's treatment of the general field of Art, and, in a sense, we are not disappointed. The book covers the ground very well, and is more consistent in actual fact than its preface and introduction would have it to be. Mr. Statham says in his preface that the object of the book 'is to give a concise history of the development of architectural forms and styles, in such a manner as to render it not a mere statement of facts in chronological order, etc.' In his introduction he says, 'It has been too much the custom to divide it [architecture] up into chapters dealing each with a special style or with the architecture of a special country.' Mr. Statham does not arrange his chapters in this way, but that is a matter of little moment. The fact is one cannot get away either from style or nationality in architecture, so why say anything about it? Mr. Statham does not get away from them in his book except when it suits him to do so, and we would not do him the injustice to suppose that he would write a book which was a mere statement of facts in chronological order.

The book is divided into seven sections or chapters, beginning with architecture before the Greeks, and ending with Renaissance and modern times. These deal in a generally comprehensive manner with the history of architecture in Europe. There is perhaps some disproportion in the amount of space given to Greek architecture and English Gothic, while diagrams such as the double-page Fig. 66¹ are hardly wanted in a work of this nature. Some space saved on this might have bettered the proportion of the book, and would have enabled the author, in the compass of the volume, to deal briefly at least with Scandinavian, Russian, Chinese, and Japanese Architecture, which, he states in the preface, are away from 'the central stream of architectural development.'

¹ The 'vertical' lines in this illustration etc., for which purpose alone they could be intended. They fail to illustrate the inclination of columns.

This may be granted, but if the Indo-Saracenic part of the chapter 'The Saracenic Interlude' had been left out, the book might fairly have been called 'A short critical history of European Architecture,' especially as with the more comprehensive title adopted, the term 'interlude' is partially misleading. The greatest achievements of the Indo-Saracenic style were built at a time when the stream of development in an entirely different direction was running busily along in Europe. The inclusion, such as it is, of work in India is the more to be regretted, as it has led the author to a scant, and I venture to think, quite unduly prejudiced reference to native Indian architecture, which might very well have been left out.

In spite of these matters, however, some of which could easily be attended to in a second edition, the book is probably the best attempt in this country to write a short illustrated history of architecture for 'him who runs.' The division of the subject is on the whole excellent, and the chapter 'from Romanesque to Gothic'—the most original part of the book—adopts the entirely satisfactory method of tracing the evolution of Gothic structure carefully and consistently through all phases of the basilican plan. The illustrations are admirably chosen and just as admirably reproduced. There is a very fair admixture of plans and geometrical drawings, which is quite as it ought to be in a work with claims on the serious general student. The chronological chart of comparative dates and events at the end of each chapter is a most excellent idea, which may have been borrowed from Viscount Bryce's 'Holy Roman Empire.' The glossary is also useful, and there appears to be a good index. There is a somewhat large list of errata, and the book is heavy, but the latter unfortunate quality is inseparable from books of this kind. It is to be hoped that it will pass through more than one edition. Some strong expressions of personal opinion, out of place in a book which should above all things have width of view, could then be omitted, or relegated to an appendix.

T. P.

Stoics and Sceptics. Four Lectures. By EDWIN BEVAN. Pp. 152. Oxford: Clarendon Press, 1913. 4s. 6d. net.

These lectures are the work not of a historian of philosophy but of a philosopher-historian—a rarer and more valuable species. The writer befitting his own philosophical attainments, but judged by a severely philosophical standard the account of the Stoic Ethics here given, slight and short as it is, must take first place among the published accounts of the doctrine in our language. We do not therefore intend to depreciate the philosophical value of the lectures when we say that throughout Mr. Bevan is and remains the historian. Throughout he seems to be working on a background of history, and the true subject of all his judgments is the Graeco-Roman world and society. In the end, plainly and indisputably, it is historical and not philosophical truth of which Mr. Bevan is in search. Such an attitude is uncommon in books read by philosophers, and when it is united with the grace of pure English and a vivid imagination it gives an impression of singular charm and freshness, sufficiently powerful to exercise the spirit of dialectic and leave the philosophic reader content for once to resign analytic criticism and receive a whole impression. To the historian and to the philosopher alike the lectures should be not only a delight but also a great help to the understanding of a difficult phase of thought and of a complicated historical problem.

The first two lectures give a complete outline-sketch of the Stoic doctrine; the third attempts an account of what the Roman world owed to Posidonius; and the fourth summarizes the various Sceptical systems of contemporary and later times. It is not Mr. Bevan's fault, but the fault of the tradition, that the third and fourth lectures are both somewhat inferior in interest to the first and second and also markedly different in form and character. On Posidonius the source-hunters are hard at work. Even since Mr. Bevan's lectures appeared several fresh attempts have been made by German writers to extend our knowledge of his influence on contemporary thought. It is a good thing, however, that he should not be left entirely to the mercy of the source-hunter, and that attempts should be made from time to time to state the general

results of such investigations in the light of wider issues. But it is unlikely that we shall ever acquire a very complete or satisfactory idea of his philosophic position. The same is true to some extent of the Sceptics; but we have, of course, Sextus Empiricus, and the abundant evidence provided by him shows pretty clearly that, acute and amusing as many of the Sceptical arguments are, there is nothing much of philosophical light or leading to be hoped for from the Sceptics. But surely Mr. Bevan is not historically accurate in representing Scepticism as 'the expression of weariness, of disgust with the endless strife of tongues,' in contrast to 'the modern Agnosticism which often goes with a vigorous interest in Science'. Philosophical scepticism is always one of two things or a compound of both. It is an attack on philosophy in the interest of something (such as 'science') which philosophers seem to depreciate, or it is an exercise in philosophic thought by one who possesses the philosopher's mind without his inspiration. Both scepticisms are found in Greece. Both have a positive basis, the one in science or some other hapless victim of philosophic doubt, the other in its own controversial energy and adroitness. The sentimental, world-weary sceptic is surely something of a figment. The attitude exists; but it does not produce philosophy, nor anything else at all.

Mr. Bevan's main principle of interpretation is that these philosophers were born to meet a practical need of men, a great emergency in man's spiritual history; that an estimate of their theories must take due account of the historical crisis. The principle is true and valuable, and brilliantly justified by the use here made of it. Mr. Bevan uses an unhappy and unrefined spirit calmed by the sweetest and bitter taste of Stoicism. It is difficult to repress a suspicion that his vision is unduly passionate; that the colours are too dark to be true. We must leave it to the historian's conscience to decide whether the suspicion is well founded or not.

Menschen- und Waltenwerden ein Beitrag zur Geschichte der Mikrokosmosidee. Von KONRAD ZIEGLER. Pp. 45. Leipzig und Berlin: Teubner, 1913. M. 2.

This short pamphlet deals with the question of the provenance of the doctrines which Plato puts into the mouth of Aristophanes in the *Symposium*. The chief point is the origin of man in a bisexual creature, the subsequent division of sexes, and the attempt at reunion through love. Dr. Ziegler seeks to show—(1) that the speech is a parody of Empedocles; (2) that the general theory implied has a basis in Greek mythology; (3) that it is closely related to the account of man's (and woman's) origin given in *Genesis*; (4) that it is Orphic—and here comes in the *Mikrokosmosidee*, for the bisexual ancestor of man is analogous to the World-egg which burst asunder into Earth and Heaven, whose marriage produced this world; (5) that all these ideas, Greek and Jewish, have their origin in Babylonia. Some of Dr. Ziegler's conclusions seem rather hazardous, particularly the earlier ones on which everything turns: the later stages of his argument follow lines with which other writers have already made us familiar. But it is an interesting little treat.

Attische Heilgötter und Heilheroen. Von FRIEDRICH KITSCH. [Religionsgeschichtliche Versuche und Vorarbeiten, XII. Band., 2 Hefte.] Pp. 158. Gießen: A. Topelmann, 1913. M. 4.80.

This book is a very useful collection of the evidence concerning the healing gods and heroes of Attica. Five principal deities are distinguished—the Herms, Iatros, Aristomachos, Anymnos, Asklepios, Amphiaraus. In each case the evidence is classified locally. The first third of the book is in the form of continuous writing; the remaining two-thirds give the full text and other particulars of all relevant inscriptions, and descriptions of the sculptural remains found in the various sanctuaries. The scheme is well carried out, but it would have been better if the literary evidence had also been tabulated, as well as scattered through the footnotes. There is not very much new theorizing. The two

most important discussions deal respectively with the introduction of Asklepios into Attica, and especially with *I.G.* 1649 suppl. (pp. 16 ff.), and with the oldest seat of the worship of Amphiaraus (pp. 41 ff.). Kutsch holds this to be Kaulia (Strabo, ix. 494 v), which he places in the neighbourhood of the Ἰατρὴ λίανη, here identified with the Οὐζοῦκὸς λίανη ἢ καὶ οὐζοῦκος 'Apus of Aslian, *F.H.* ii. 45, etc.

One point of detail may be mentioned. An early fourth-century inscription from the Athenian Amyneion (No. 5 = *Att. Mitt.* xi. 1896, p. 294, 1) records a dedication Ἀσκληπείῳ Ἀπίωνι. Kutsch does not consider the possibility that this may imply an identification of the two deities, like that of Ἀριστομάχος-Amphiaraus, which he infers from the similar inscription on the basis of the cult-status in the Ἀριστομαχίῳ of Rhamnus (No. 5 = *Opusc.* 1891, 18).

Antike Schriften über Seelenheilung und Seelenleitung aus ihre Quellen untersucht von PAUL RABINOW. I. — Die Therapie des Zorns. Pp. vi + 198. Leipzig: Teubner, 1914.

The aim of this learned work is to trace the origins of the methodical therapeutics of anger preached and practised under the early Eupyræ. Sources *de ira* and Plutarch *peri angustias* are carefully analysed, and the connections of these works with other writings, especially Posidonius, Sotion, and Philodemus *peri hyphs* and Galen *peri phrenes pathon* are ably discussed. The author deals also with the relation of Antiochus to Chrysippus in the third book of the Tusculan Disputations, and concludes that Antiochus' apologetic restatement of Chrysippus' views is the source of the attacks on metriopathy in the fourth book of the *Tusculanae* and in the first and second books of the *de ira*. Several controversial points are elaborately discussed in appendices. There is an index.

Dikaionomata: Auszüge aus alexandrinischen Gesetzen und Verordnungen. Herausgegeben von der GRAECA HATKESCH. Pp. x + 252. 9 Plates. Berlin: Weidmannsche Buchhandlung, 1913. M. 20.

Those persons who, on hearing of a mysterious papyrus of great importance at Halle, formed visions of some lost literary masterpiece, will have been disappointed at finding the papyrus in question to be merely a collection of Alexandrian ordinances; and even so the positive knowledge to be gained from these so-called *Dikaionomata* is less than might have been expected from the preliminary announcements. None the less the Halle papyrus is a document of very great value, ranking, among Ptolemaic papyri, next after the papyrus of the 'Romanus Lexes,' and being, in one respect at least, even more valuable than it. For these ordinances of Alexandria are purely Greek in character, and are of considerable importance in their bearing on Greek law in general; only the laws of Gortyn surpass or even equal them in this respect. The papyrus, which is to be dated about the middle of the third century B.C., consists of extracts, occupying eleven columns of varying width, and in several hands, from miscellaneous laws and ordinances. Many of the extracts are clearly not complete, the scribes selecting just what was relevant to their purpose and omitting the rest. In one case an extract is headed *de rfoi en* [ἀρρετὶ νόμου]; i.e. it is taken from the law of the city (Alexandria), as the editors, no doubt rightly, interpret the phrase; and in the case of several others a similar source is highly probable. In column viii is quoted a letter (taken by the editors as a *proterogon*) of the king; and the best document quoted is a letter of a certain Apollonios, probably an *epistates*. The subjects dealt with are so various as the sources from which the extracts are drawn, among them being the proceedings in actions for false witness (ψευδομαρτυρία), the rights of neighbours, suits in cases of assault, the law regarding legal situations of persons despatched on the royal service, assaults by slaves, oaths, sales, etc. For this reason the editors' theory as to the nature of the compilation may be doubted. They regard the extracts as *dikaionomata*, i.e. 'Beweiskunden' for use in a court of law, the principle 'iura non nisi iura' being, as is well established, unknown to Ptolemaic procedure.

They explain this variety by supposing that they concern several different processes; but even so the difficulty is only lessened, and Vinogradoff's view (*Klio*, xiii, p. 496), that the MS. is the 'scraps-book of an Alexandrian lawyer' (we must add, 'resident in the $\chi\alpha\upsilon\mu\acute{\omicron}$ '), seems rather more likely. Schubert, indeed, has put forward a theory (*Gibt. Ant.* 1913, 10, pp. 322 f.) that the Arsinoë mentioned in the king's $\pi\rho\omicron\tau\epsilon\rho\gamma\mu\alpha$ ($\text{Apocryphes r\acute{e}g\acute{e} et d\acute{e} A[ρ]σινόωντος π\acute{o}λις$, II. 179 f.) was a hitherto unrecorded Greek settlement (perhaps not formally a $\pi\acute{o}\lambda\iota\varsigma$) near Edfa and that the MS., which was probably found in that neighbourhood, contains 'einen Auszug aus den Grundordnungen' of this settlement, which got its laws partly from Alexandria and partly from royal decrees. The hypothesis is a very interesting and may prove a fruitful one, but there are obvious objections to it and it cannot be accepted without careful examination.

The editorial work is, as might be expected from the names of the editors, of the highest quality; even when the editors are dealing, as they often must, in conjectures, and seem to build an elaborate edifice on a very small basis, their hypotheses always proceed from knowledge and reveal sound judgement: and often an apparently insignificant fact is made in their hands to yield an astonishingly large result. They print first the complete text of the document, and then, after a general introduction, repeat the text section by section, with an elaborate commentary; and they conclude with some general remarks on the chief contributions made by the document to historical knowledge.

As an appendix are published a number of smaller papyri: at Halle divided into literary texts and 'Urkunden aus ptolemäischer Zeit,' the latter all of the third century B.C. Neither section contains anything of the first importance: the small Sappho fragment (No. 3) serves but to tantalize by its incompleteness. The 'Urkunden, however, small as they are, are made by the editors' industry and acuteness to yield results of considerable value: special reference may be made to No. 9 with its important introduction on the 'Court of Ten' (*Zehnwandergericht*).

Studien zur ägyptischen Verwaltungsgeschichte in ptolemäisch-römischer Zeit. Der *Βασικὸς γραμματεὺς*. Von Erhard Biedermann.
Pp. ix + 133. Berlin: Weidmann, 1913. M. 3.60.

The scheme of this thorough and business-like little book is to take an important official of the Egyptian administration, the *Βασικὸς γραμματεὺς*, and follow out his various activities through the Ptolemaic and Roman periods to the middle of the third century A.D., when he vanishes. The first section of the book deals with his office and title: the second, much the longest and most important, with his powers in relation to the assessment and collection of taxes, the administration of municipalities, land, public works, and temples, and the business of transporting corn and provisioning court and army, as well as with his scanty judicial functions; the third, with his relationship to other officials. A list of all the known *Βασικοὶ γραμματεῖς* and two indexes conclude the work. The author follows Wilcken's general outline more or less closely, while filling it in and supplementing it with all available detail, detail occasionally drawn, as is inevitable, from documents whose reference to the *Βασικὸς γραμματεὺς* is merely conjectural. But the central point of the author's conception of the office he treats of is not to be found in Wilcken: it is that the *Βασικὸς γραμματεὺς* was the official responsible for keeping the land-survey of the nome, together with all the lists (whether relating to the persons of the inhabitants or their possessions in houses, slaves, and cattle) necessary for assessing and collecting the taxes; and that all his other powers and activities depend on this function. As this is the thread on which the rest of the book is strung, it is worth remarking that the passage on which the author relies to prove that the *Βασικὸς γραμματεὺς* was responsible for keeping the land-survey of the nome (*B.G.U.* I, 145 l. 5) is not a compelling proof; it would satisfy the wording of the original if he had access to it. That the author is right, nevertheless, is proved by P. Teb. I, 30 and 31 (see pp. 23, 24); but it is a defect in arrangement. It may also

be noticed that the reader may well find himself more than half way through the book before he perceives what it is that gives unity to the various details; if the book had been prefaced with something like the excellent general statement which occurs on p. 98 it would probably help readers by providing them at the start with a synopsis. The third section handles (among others) the difficult question of the relations of the *Beschränkte* *πομπαιρέ* first to the *κλεινός* and later to the *εργεργός*. Perhaps no satisfactory theory of his relation to the former can be framed without new material; but the author's view that the *εργεργός* and the *Beschränkte* *πομπαιρέ* formed a single department (*Behörde*) for the administration of the *νομός* is well worked out. One may hope that the title of the book means that we may expect other studies by the author in the same field.

Die einheimischen Namen der Lykier nebst einem Verzeichnisse kleinasiatischer Namenstämme. By JAN SCHWALL. (*Klio*, XI Heft 1.) Pp. 226. Leipzig: Dietrichsche Verlagsbuchhandlung, 1913. M. 14.

All scholars who are especially interested in Asia Minor will be grateful to the author for the long list of proper names, personal and local, which he has compiled. The remarks in Chapter I, pp. 37-44 and in Chapter III, are of course highly defensible. The supposed Carian genitive in *-x* (p. 39) can only be supported by alterations in the texts for which there appears to be no justification. The present work confirms what Kretschmer's *Einleitung* had sufficiently demonstrated, that a language very closely allied to the Lycian was at some period or periods spoken over a great part of Asia Minor. It is not proved that such a language was ever spoken by the historic Carians or Lydians, any more than by the Phrygians.

Studien zur griechischen Geschichte im sechsten und fünften Jahrzehnt des vierten Jahrhunderts v. Chr. By E. POKORNY. Pp. xvi + 169. Greifswald: Adler, 1913.

This volume contains a critical examination of recent histories of the events of 358-346 B.C. in Greece, with special reference to the theories lately omitted by Kahrstedt (*Forschungen*, pp. 1-134). The result of these investigations is to overthrow Kahrstedt's *möbel* reconstructions at almost every point, and to corroborate in the main the traditional version as established by Grote and Schäfer. In particular, discredit is cast upon Kahrstedt's erratic chronology of the Phocian War, and upon his curious contention that Demosthenes' policy consistently served the interests of Persia. Little fault can be found with Dr. Pokorny's book, which is based on a painstaking study of ancient and modern authorities, and is guided by a sober and unadventurous judgment. His treatment of Athenian politics in 348-6 B.C. requires some slight corrections. When he says that the attempted conversion of the Theoric fund in 348 B.C. to military purposes was not the work of Eubulus' party, he forgets that, for all that we know, the author of the proposal may have been an adherent of Eubulus. In determining the parts played by Demosthenes and Aeschines in the debates on Philocrates' peace he gives too much credit to Dem. xii. 15—a thoroughly marvellous passage. He goes beyond his evidence in saying that the Thracian fortresses captured by Philip in 346 B.C. were garrisoned by Athenian troops: none of the passages which he quotes makes good this statement, neither can it be safely inferred from Dem. ix. 15. Further, he omits to quote the important letter of Philip to the Athenian envoys, ordering them not to follow him into Thrace (Dem. xii. 36). But these omissions hardly affect the value of Dr. Pokorny's conclusions, to which his readers should be able to give an almost unreserved assent.

Die Tetradrachmonprägung von Syrakus in der Periode der signierenden Künstler. Von LAURI O. TH. TUDEER. (Reprinted from the *Zeitschrift für Numismatik* 1913.) Pp. 292. Berlin: Deichert, 1913. M. 3.

This laborious and painstaking monograph deals with a series of coins which has perhaps been the object of closer study than any other, yet the mass of organised material here made available would alone justify its publication. The author, however, besides many smaller corrections, has been able to modify the results of his predecessors on some of the larger questions involved. Every coin in the more important public and private collections, besides those appearing in recent sale-catalogues, has been described, and evidence drawn from the coupling of dies and of their progressive deterioration has been used to determine the sequence of the issues. This method, though on the whole satisfactory, is open to two objections. First the condition of the dies in such coupling has as a rule to be taken by the reader on trust; obviously each case cannot be checked by illustration. In the second place it assumes that a die was worked until it was worn out. That an old die may be brought back into use even after a considerable lapse of time has been shown by Sir Arthur Evans in his paper on *Terina* (*N.C.* 1912, pp. 68 *sq.*). True this is an exceptional case, but in group 4 of the present series reverse die 16 is coupled with obverse die 10, which is next joined to reverse dies 17, 18, and 19, after which we find reverse die 16 again used, this time with a new obverse die 11. The writer explains this by postulating 'zwei Münzstiche,' but before unreservedly accepting the assumption one would like to know more about the organisation of Greek mints.

The earliest signatures and the innovations in the treatment of the quadriga accompanying them are placed in the years 430-425, thus confirming Holm as against Sir Arthur Evans' earlier dating, though many will not follow the author in putting Sosion before Eumenes, who is satisfactorily distinguished from Eumenes, Eu... and possibly Eum... The pressure of the Athenian siege is shown in an interesting way in the prolonged usage to which the dies of Groups 2 and 6 were subjected, while the famous East die and the sudden appearance of the head of Kore—the champion of Sicily—are plausibly brought into connexion with the national victory. Against the chronology of Evans the last group of tetradrachms is brought down to the first decade of the fourth century, while the decadrachms are placed almost entirely before 400. We cannot agree however that the tetradrachms bearing the same heads as the large pieces of Kimm and Eumenes are late copies. A few plated coins are described at the end and the author notes that the fact that many of these come from the same dies as coins of good silver goes to show that plating was the work of private, not official, hand. Reference to the plates would have been easier if coins had been cited by the numbers of their dies as well as their running number, while the value of the whole work would have been greatly increased by an index.

Days in Attica. By Mrs. R. C. BOSANQUET. Pp. ix+348, 17 illustrations and 2 plans. London: Methuen and Co., 1914. 7s. 6d.

Mrs. Bosanquet's book will be welcomed by many readers besides 'the traveller who goes to Greece without much previous knowledge of its history.' People who have lived or travelled much there will linger over the pages in which she gives her own personal impressions of the land and the people. Even students will find much that is useful, for the writer brings her sketch of Attic history down to the present century, and students, especially students of classical archaeology, will be brought face to face with the Byzantine and Frankish remains in Greece, are apt to forget that its history did not end with the Roman dominion.

Probably Mrs. Bosanquet has no very profound knowledge of Attic history in any period, but she knows where to find her material, and she has the historic sense, the instinctive feeling for the salient facts and the salient forces in each period. She has, moreover, a well-trained critical faculty which enables her to seize the individual notes of

each phase of Greek art, and to state it clearly. She does not gush over fifth-century Athens and its political and artistic achievements, but she directs the reader's thoughts along the lines most likely to lead to appreciation of the human and historic importance of those achievements.

The book opens with a sketch of Cretan history, for which the Thesens legend supplies reasonable ground, and, in this connection, it may be pointed out that the Sack of Cnossus is usually dated to the fourteenth not the fifteenth century, and that the Cretan hegemony in the Aegean can hardly have lasted 2500 years. From Crete the reader passes by Nauplia, Tiryns and Mycenae to Athens, travelling from the Isthmus to the footsteps of Titaneum. The book does not profess to be a guide-book, and, therefore, though Mrs. Bosanquet gives a plan of the Acropolis, and some account of the buildings on it and in the town, and of the contents of the museums, she is chiefly concerned with their historical interest, not with their archaeological value. It is thoroughly in keeping with this treatment of the subject that she should choose for reproduction a view of the Acropolis taken in 1825, when it was encumbered by a Frankish Tower and Turkish houses. The Acropolis of to-day, swept bare of everything but fifth-century buildings, is a far less human document.

The illustrations are well chosen and unbackwired, and the addition of a bibliography of books of reference should be of material help to the traveller who wishes to study any special period more in detail.

Stitches from Eastern Embroideries from Countries bordering on the Mediterranean, from Greece, the Near East and Persia. Portfolio 2. By LOUISA F. PESSEL. 48 Plates with an introductory note. London: Percy Lund, Humphries and Co., 1913. 10s. 6d.

The scope of Miss Pessel's portfolio is sufficiently described by its title. In a series of forty-seven admirably designed Plates she explains graphically the methods of working many of the complicated stitches found in the embroideries of the "Near East." Thus she approaches her subject from the technical, not the historical or artistic side, but in an Introductory Note she points out a fundamental difference in character between the stitches used in the Eastern embroideries and those found in English work. In the latter the preference is always for stitches which give pattern-effects, and these are, therefore, more 'free-hand' in style, while the Eastern stitches, being worked by the thread of the material are more rectangular or 'geometrical.' Any discussion of colour schemes lies outside the limits of the Note, but Miss Pessel draws attention to the predominant importance of red in any scheme of which it forms part. Thus when a border contains red, blue, and green, the colour sequence is red, blue, red, green, and this proportion holds good in embroidery from every part of the Eastern Mediterranean area.

An Index of the names of the stitches described facilitates reference to the Plates, and notes on their geographical distribution add greatly to the scientific value of the publication, which, within its own limits, could hardly be improved.

The Message of Greek Art. By H. H. POWERS. Pp. x+336. New York: The Macmillan Company, 1913. 8s. 6d.

Dr. Powers disclaims any intention of writing a history of Greek Art; his object is to write such an account of things Greek as shall enable his readers to appreciate Greek civilization, and the personality, ideals and experience of the Greeks. These are most completely revealed in Greek Art, and therefore he takes it as his text. One thing strikes us at once: Dr. Powers assumes in his public a complete ignorance of Greek history and literature. This is interesting, because the book is written for an American

public by an American writer who is especially well-qualified to gauge the mental equipment of his countrymen. A European writer would reasonably assume complete ignorance of archaeology in his readers, but he would also assume a classical foundation in their education, and would judge it unnecessary to explain the Greek conception of a 'tyrant,' to tell at length the story of Orpheus and Eurydice, or to write an excursus on the reasons for the preponderance of male male figures in Greek plastic art.

Given the public for whom he writes, Dr. Powers is well advised in excluding from his pages all discussion of controversial matter. Exception might be taken to many statements in his sketch of the Aegean civilisation, but it has the merit of presenting a consecutive and identifiable picture of the period, and, as he rightly says in another connection, the important thing is to give the reader a clear impression to start with. It is a matter of opinion whether, in a book of this kind, it is allowable to 'make a freer use of conjecture' than in a purely archaeological treatise. We should say not, because the reader is not in a position to discriminate between fact and conjecture. And surely, even in a 'popular' work, it is rather too free a use of conjecture to describe a 'reception' on the Acropolis in the days of Ptolemaios, or to suggest that the 'Mourning Athena' relief may be an early work of Phidias.

The compass of Greek Art is carried down as far as 146 B.C., and is illustrated by a large number of reproductions of vases, statues, reliefs, etc., which, as a whole, are judiciously selected. From the archaeological point of view the best-informed chapter is that on Greek grave-reliefs, of which fourteen are reproduced. The index is disproportionately slender compared with the bulk of the volume, but this contains so much that has nothing to do with things Greek, that the index may very well be an adequate guide to all that is said about Greek history and art.

Greek Art and National Life By K. C. KAIMES-SMITH. Pp. xiv + 274. 27 Plates. London: James Nisbet, 1913.

Greek art may be studied from many different points of view. There is a definite and honourable place in its literature for books which deal with it not from the scientific, but from the imaginative side. Provided always that the writer has power of original thought and the artistic sense. This book displays neither of these qualities. The author unfortunately for himself, has a fatal facility for phrase-making and his phrases run away with him. They are quite effective, but an inadequate substitute for thought. His imagination also runs away with him, and this is the greater crime because the reader (presumably without expert knowledge) is entirely at his mercy.

There is a dreadful sameness in the illustrations of books of this class, and the selection given by Mr Kaimes-Smith does not specially illustrate the point which he wishes to enforce, viz. the intimate connection between Greek art and Greek national life.

Greek Sculpture and Modern Art. By SIR CHARLES WALDSTEIN. Cambridge University Press, 1914.

It is a deplorable tendency of many art-writers that they fail very largely to see the continuity of art-history. The modernist, whose knowledge of Greek art is often derived mainly from a set of dusty casts in an art-gallery, tends to dismiss it as old-fashioned classical stuff with very little bearing on the problems of to-day, and the classicist in his turn is all too ready to view art from the standpoint of archaeology and utterly 'poo-poo' whatever's fresh and new. A book therefore with a title like Sir Charles Waldstein's arouses our hope and expectation of a more synthetic treatment. On the whole, however, in spite of some excellent passages all too few and far between, this book—really two reprinted lectures to the students of the Royal Academy—tends to keep up the old antithesis on the part of the author as classicist and a modernist contributor to

the *Times*, whose criticism is printed in an Appendix. Briefly Sir Charles claims for ancient art a superior technique and a superior power of selection. His controversy with his critic turns mainly on Rodin's 'La Vieille Hasaulnière.' Is it or is it not a fit subject for artistic representation?

Both the author and his antagonist wholly forget that such statues as 'La Vieille Hasaulnière' are common-places of Hellenistic art. The persistent view that Greek art stops short with Lysippus and even begins to decline after Pheidias makes its time-honoured appearance. A paragraph on p. 56 brings the old charges of dramatic sensationalism against the Hellenistic period.

Greek art, as a matter of fact, passed through almost every style of development which has been observed in later art-history, and the reason why the Greek development is so much more valuable than any other is precisely because here and here alone we have art evolving from within from the very beginning to the very end, from babyhood to second childhood, without any very overwhelming influences from without. The realist, the materialist, the futurist, the impressionist are familiar enough figures to any one who will study Hellenistic sculpture, but so long as we close our eyes to all technical developments after art has once passed the zenith of idealism we shall never read the message which the artist of Pergamon and Alexandria might well give to the modern student.

The book is marred by some unnecessary errors. Under Plato XVI. we should read Gorgotto for Gorgo. The contour shown on Plate XIX. is the white marble Louvre copy not the basalt statue of the Capitoline Museum. The title of Plate LII. perpetuates a curious blunder already made by the author in the first edition of the *Cambridge Companion*. In Plate LXII. we read Niobide for Niobid. On p. 12 we should add *as found* to Martos Tolosanes, on p. 14 Pergamone is unnecessarily expanded into Pergamenean. On pp. 4-6 we have very questionable theories about early Greek technique. If the Delian figure of Nike is probably derived from wood-carving, the Sunkat *semonis* is certainly connected with hemise-work as we might expect in the traditional birth-place of bronze-casting. The thin parallel grooves of the drapery are derived from clay, not from wood-technique. The Fames statue shows very little trace of wood-technique, but a great deal of primitive stone technique. The dog-tooth hair pattern of the Arropolis *Korn* is due to no influence from wood. It is the most primitive form of chisel-work—a series of plain strokes on three sides of a square ridge. No wood-carver would have dreamed of such a process.

The Plates are mostly well known and are of rather unequal merit. When the *Moschophoros* is so confidently labelled 'Apollo,' one is almost surprised not to find a name given to the *Korn*. A few less-known illustrations such as Plates 21, 32, 35, 39, 68, 73, 78 are very welcome. The author is at his best when he is dealing, as on pp. 56, 57, with what he calls the Doctrine of Artistic Equivalence in Nature and Life, but he ought to explain to us more clearly that the Greeks as well as the Moderns rose in revolt against it.

G. D.

Die Anfänge der griechischen Philosophie. Von JOSEF BONNET, übersetzt von Elise Schenkl. Pp. vi+348. Teubner, Leipzig.

This is a translation of the second edition of Burnet's *Early Greek Philosophy*, appropriately dedicated to the Congress of German Scientists and Physicians which met at Vienna last autumn. There is of course no better, wiser, or more interesting account of this period of thought than Professor Burket's, and we congratulate the German student the more on the prospect of a translation because Burnet's suggestions have not always received in Germany the attention which they deserve. The book should be given, as the translator says, 'an honoured place beside Zeller and Gomperz'; and even the dazzling light of Hermann Diels should not blind German readers to Burnet's contributions to the philology of the subject. The translation seems to be well executed; but

on p. vi Prof. Beare's book is mischievously given as 'Greek Thinkers of Elementary Cognition.' For 'Thinkers' read 'Theories.' Frau Schanckl has seen to it that the German reader shall be better off as regards Indices than the English.

Homer. Von GEORG FESLER. Erster Teil. Der Dichter und seine Welt. Zweite, durchgesehene und vermehrte Auflage. Teubner, 1914.

This is a second edition of the agreeable and successful work which came out in 1907. The author has taken account of the literature that has appeared since that date, and also as he says of a number of French, English, and Italian works which were neglected in the first edition. His standpoint however is unaltered, and the bulk of the book unchanged. The standpoint is one which may fairly be called old-fashioned, and the repetition of so much which no longer holds good seems unfortunate for the somewhat elementary readers for whom the book is intended. About a hundred pages also are devoted to the account of the Homeric Question, without which no manual is complete. One would have been glad to have more of the author's 'eigene Ansicht.' This however is promised in Part II, which is to contain an exposition of the whole of the poem.

T. W. A.

Homerische Aufsätze. Von Dr. ADOLPH ROEMER. Teubner, 1914. M. 8.

Adolph Roemer died on April 27, 1913, not long after the publication of his *Aristarchus Atticism in der Homerkritik*, of which a notice by the present reviewer will be found in the *Classical Review*, May, 1914. He had designed a companion work, *Aristarchus as an Editor*, but only fragments of it were found at his death. Of the three essays contained in this book, the first had been finished by the author; the second and third owe their publication to the care of Behmer. They are entitled (i) Ein ernstes und selbständiges Wort über den Kunstscharakter der homerischen Poesie, (ii) Der Kunstscharakter des zweiten Teiles der homerischen Odyssee, (iii) Einige Probleme der Göttermaschine bei Homer. They all contain vigorously expressed criticism, usually in opposition to prevailing views, and often, given the uncertainty of the subjective method, sound. The results appear more successful than those of the somewhat paradoxical book which came out last year.

T. W. A.

Athens and its Monuments. By C. H. WELLES. Pp. xxiv + 412, 262 illustrations. New York: The Macmillan Co.

The course of new discovery and investigation offers plenty of scope for each new book on Athens to show an advance on its predecessors; and Professor Welles has availed himself fully of his opportunity. He has evidently kept himself well informed as to the most recent theories: the chief difficulty in writing such a book as this is to know exactly how much to put in, how far to state the arguments on both sides in controversial matters, and how far merely to give results or conclusions. The limited size of the book compels the author to adopt this last method in almost all cases; but he is careful to state when ever uncertainty exists. The result may sometimes be somewhat confusing to the student, but at least he will feel that the case is put fairly and impartially before him, and that he is given a reasonable account of the present state of our knowledge. For example, a fairly full statement is given of Mr. Hill's interesting discoveries as to the extent remains of the earlier Parthenon.

The author has, in the main, followed the description of Pausanias, but has supplemented it by introducing chapters and digressions so as to include what is omitted by Pausanias, and to make historical relations clearer. A notable feature of the book is the very full illustration: the views and other representations are mostly well chosen and intelligible, and are useful both in refreshing the memory of those familiar with

Athens, and in helping those who are not to realize the descriptions in the text. There are also several convenient sketch-plans, but these hardly make up for the absence of a good general plan of the town.

Black Glaze Pottery from Rhitsona in Boeotia. By P. N. CRE. University College, Reading, Studies in History and Archaeology. Pp. 64 + 19 Plates. Oxford University Press, 1913. 7s. 6d.

The series of studies published by the University College, Reading, occupied up to the present with local antiquities, enters a wider field with this its fifth monograph, dealing with that most prolific of Boeotian sites, Rhitsona. The work consists of two parts, of which the first is an attempt to date the various forms of black earthenware, many hundreds in number, found in eleven graves previously published: it also includes a revised grave-catalogue, in the usual statistical form, of those vases which were not fully prepared for publication with the other and more exciting contents of the tombs. These graves were assigned by the excavators in 1908 to the late sixth century, since then the German excavators of Tiryns have proposed an earlier period. It is, however, with the relative, not the absolute dating, that we are here concerned; and, taking as his basis the graves for which a place in the chronological series has been for other reasons determined, Prof. Cre has drawn up a table showing the proportion of the various shapes found at different periods. Little reliance, as is observed, can be placed on theories of development of shape, and the validity of the results obtained depends entirely on the correctness of the relative arrangement and the integrity of the burial; it is also possible that the statistical evidence may be vitiated by accidental circumstances in less than a dozen tombs and within a comparatively short period. Prof. Cre, however, has made a very gallant attempt to arrive at conclusions from very unpromising material.

The second part of the work is a complete publication of fifteen more graves from the same site, but of a much later period. Three of these, containing coarse unpainted ware, are assigned to about 250 B.C., but the bagynos-shaped flask, No. 10 on Pl. XVIII, is probably later. The other graves are probably of the fourth century B.C. and contain a mass of black pottery with the twisted handles and fluted sides popularly derived from Hellenistic iventilators, also many examples of stamped or impressed decoration. Here, again, Prof. Cre is almost a pioneer, and the solid mass of facts which he has collected will be invaluable to future students. The contents of these Boeotian graves come at a dull period in ceramic history; red-figure wares have gone, and the later monochrome vases are not yet in evidence; but Prof. Cre has gone far to substitute accurate knowledge for the vague generalizations under which the mass of this pottery in our museums has hitherto been grouped. The index and plates are both good; the method of showing sunken decoration on the latter is distinctly commendable.

Die Ficorinische Cista und Polygnot. An inaugural Dissertation for the Doctorate of the University of Tübingen. By EUGEN FEHL. Pp. 77. Tübingen, 1913.

Twenty years ago Carl Robert attempted a reconstruction of two paintings of Polygnotos, of which more or less complete literary descriptions were available, with the aid of a group of vase-paintings which may or may not be commercial adaptations of the Polygnotan style. Since then a rich literature has arisen in Germany striving to reconstruct on this slender basis the long vanished fabric of Greek painting. Much labour and boundless erudition have been brought to the pallid task of deriving suppositions masterpieces of lost artists from objects of the most varied nature—bow-cases intended for Scythian chiefs, or vases designed for Greek households; but our confidence in the results obtained may possibly be shaken by the discovery that they are not universally accepted by the doctors themselves.

In 1907 appeared a Doctoral dissertation at the University of Tübingen proving that the engravings on the Etruscan cista from Praeneste are copies of such a Polygnotan masterpiece. Now comes a second dissertation from the same fertile source of Greek art, showing conclusively that they are nothing of the sort and seeing in them all the decadent immaturity which to the severe eye of Tübingen betray the cloven hoof of the Praxitelean school. There is abundant evidence of industry and observation in the work; but these elaborate deductions from hypothetical premises, though so popular even outside Germany, can hardly be called scientific archaeology.

Thanatos in Poesie und Kunst der Griechen. An Inaugural Dissertation for the Doctorate of the University of Munich. By KURT HERMANN. Pp. 99; 11 Plates. Munich, 1912.

A carefully written little book dealing, as its title implies, with the personifications of Thanatos in Greek literature and art down to the close of the fifth century B.C. The account of literature is scanty; indeed, apart from Attic white-ground lekythi, which form a class apart, Thanatos only appears in the art of the period on vase-paintings of Sleep and Death bearing off Sarpedon, and these same groups have also been identified as Menon carried away by the Wind-gods Zephyros and Boraeas, a view which is vigorously controverted by our author in a lengthy appendix dealing with the various instances in detail. The book opens with a review of previous writings on the same subject, after which the literary evidence is methodically examined. The Thanatos of popular tradition, grim and forbidding in Hesiod, but often burlesqued, as in Anaxagoras, finds its highest expression in the *Alceste* of Euripides. By the side of this, however, there appears already in Homer the concept of Death as the brother of Sleep, friendly to man and ending human woes, and it is naturally this aspect that is reflected in art. The vase-paintings of the black and red-figure periods, if indeed rightly interpreted, show a winged armed figure, generally, though not invariably, bearded to distinguish him from Hypnos, who assists him to lift the body of a dead hero. The Thanatos on white lekythi, however, is unarmed and has really no prototype in artistic tradition, but is an independent plastic conception of the late fifth century. The eleven plates reproduce the more important vase-paintings.

Die antiken Odyssee-Illustrationen in ihrer kunsthistorischen Entwicklung. By FRANK MÜLLER. Pp. 135; 9 illustrations in the text. Berlin: Weidmannsche Buchhandlung, 1912. M. 6.

This work is an investigation of the evolution in Greek and Roman art of the types and subjects chosen from the text of the *Odyssey*. Many archaeologists of an older generation have ransacked the available mass of archaeological material to obtain school illustrations for the Homeric poems, but the further task of sifting the harvest has received scant attention; there is the work of Ballo (*Die Monumente der Odyssee veranschaulicht*, Berlin, 1882), but since then much new material has come to light and the present work owes little to its predecessor. The method adopted by Müller is to take in chronological order each episode as it appears on existing monuments and to trace its treatment through the succeeding periods. The subjects chosen by early Greek art are the episodes of the Cyclops, the Sirens and Circe (it is interesting that the earliest illustration, the Aristonophos crater, is obviously based directly on the text). With the famous paintings of Polygnotos, the Nekyia, the Slaughter of the Saitors, and the meeting with Nausikaa, a wider range of subject is opened to the illustrator; and in the Hellenistic period appear regular series of pictures, or even plastic groups, illustrating methodically the whole work. Under this category come the well-known 'Homeric bowls' and the landscapes discovered on the Esquiline. The work, which is based on the author's Dissertation of 1906, is suggestive and accurate, and deserves to be widely known.

Prodikos von Keos und die Anfänge der Synonymik bei den Griechen.

VON DR. HERMANN MAYER. Pp. 159. Paderborn: Ferd. Schöningh, 1913. M. 5.

This is the first instalment of a series of *Rhetorische Studien*, produced under the direction of Professor Drüpp. Dr. Mayer divides his treatise into two parts, the first dealing with Prodicus himself as the parent of the *ars synonymica*, the second with younger writers who came or might have come directly under Prodicus' influence. It was unlikely that new researches would succeed in adding anything to our immediate knowledge of Prodicus himself; and in fact Dr. Mayer has contented himself under this head with redispensing the material already accessible in other works. And how slight and unsatisfactory the material is! It is practically all contained in a few pages of Plato's *Protagoras*. (The 'Heraclides' of Xenophon is not even a guide, according to Dr. Mayer, to the style of Prodicus.) After summarising the main features of Prodicus' treatment of synonyms, Dr. Mayer goes on in his second part to find reproductions of these features in later writers. The writers chosen for the investigation are (1) Sophocles and Euripides; (2) Herodotus and Thucydides; (3) the Rhetor-sophists—Thrasymachus, Gorgias, Anaxiphon; (4) Andocides, Lyman, Antisthenes, Alcibiades; (5) Isocrates. It is in regard chiefly to three of these authors that the writer claims positive value for his results, viz. Thucydides, Antiphon, and Isocrates. In them he finds conclusive proof of Prodicus' influence. (He is inclined to identify Antiphon the Sophist with Antiphon the Orator, but it is the oratorical works in which Prodicus' influence is chiefly seen. This is explicable, so he suggests, if the 'Sophist' is the youthful Orator.) Under each author Dr. Mayer gives the evidence in full, so that the reader can form his own opinion as to its value. The collection of the evidence must have been a laborious task; but it was a useful piece of work. The book makes a clear contribution, small though it may be, to our knowledge of the origins of Greek rhetoric.

Katalog der griechischen Vasen im bosnisch-herzegowinischer Landes-

museum zu Sarajevo. By EUGENE BELASICA. Pp. 48, 1 Plate. *Separat-Abdruck aus Wissenschaftliche Mitteilungen aus Bosnien und der Herzegowina*, XII. Band, 1912.

Description of a small collection, containing examples of Cypriot, Mycenaean, geometric, early Attic and Boeotian, Attic bf. and rf. pottery, and three fragments of Kalceion bowls. Among the rf. vases half of a late fifth century onlyx-krater with fighting scenes, and a curious rhyton in the form of a silen, with the contest for the tripod on the upper part (restorations either in the photograph or in the original). The rough bf. lekythos, Fig. 44, was found on the island of Lissa. The bf. vase from Rhodes, Fig. 38, is surely not Corinthian but Attic.

Weissgrundige Attische Lekythen. Nach Furtwänglers Auswahl bearbeitet

VON WALTER RIEGLER. 2 vols. Pp. 143, 96 Plates. Munich: Bruckmann, 1914.

The work is in one sense a supplement to Bruckmann's great publication, Furtwängler-Reichhold-Hanser's *Griechische Vasenmalerei*, which excludes white lekythoi although it has published some of the white-ground cups and is to publish others. But the white-ground lekythos occupies a peculiar place among Attic vases, and may fitly be made the subject of a special memoir: it has its own subjects, its own technique, and its own history: it stands to the wine cup and the water-pot as the small quarter of the dead, with its thin, quiet streets, to the loud and spacious city of the living.

Riegler's book then is not a series of publications, like Furtwängler-Reichhold, but a finite and self-contained treatise. It consists of 96 plates of reproductions, mostly in heliogravure, from photographs taken by the cyclograph, and a separate volume of text, dealing with the technique and history of the white lekythos and containing many minor

illustrations. The largest and finest collection of white lekythoi is in the Athens museum, and it is from this collection that the greater part of Riezler's examples are taken: but most of the more important lekythoi in Berlin are illustrated, besides a good number from the Louvre, and some from Munich. The pictures are nearly all excellent: the white lekythos, thanks to its shape and its colour, lends itself better than other vases to photographic reproduction, and the invention of the cyclograph makes it possible for the whole picture to be reproduced in one photograph. Curiously enough, the book makes no reference to the inventor of the instrument, Mr. A. H. Smith, who surely deserves the gratitude of the author: what makes me sure that this omission is owing to no oversight is that the debt was duly acknowledged in that quaint document, the polyglot circular which heralded the book's appearance. The author has wisely refrained from retouching his plates, and in the few cases where the original vase has been tampered with, however slightly, he is careful to warn the reader. Such a collection of highly trustworthy reproductions is of great value to the study of Greek art.

The book does not contain all the finest white lekythoi: for a few of these had already been sufficiently well published, and others were not accessible to the editor and his colleague, the late Dr. Hackl. A good many of the best pieces still remain unpublished: for example, the new Hygieion lekythos, and a severe piece with Chiron and Achilles, in Copenhagen: a very early lekythos with warriors, and a late one, resembling Pl. 92, in St. Petersburg; and several pieces in America, although three of the best Boston lekythoi appear as text-illustrations. If it had been possible to include these, we could have spared a certain number of Riezler's plates; but as it was not possible, we are thankful to the author for giving us so many masterpieces since he could not give us them all.

The lekythoi with the earlier glaze-paint technique make better pictures than the later with dull outlines, for the surface is usually better preserved and the drawing must always have been clearer; but the camera has done its best, and a good best, with the dull-outline lekythoi as well. In two instances, the photographic reproductions are accompanied by coloured drawings from the hand of Gilliéron: the first of these plates is very successful, the second pleasant, but less satisfying, because Gilliéron has not contrived to cover the woman's hipation with that even wash of dull gray which it originally had, and which is needed to balance the powerful red of Hermes' sandals. Both these lekythoi belong to the earlier period: it is a pity that the author was unable to carry on his original intention of adding a third colour-plate after one of the late lekythoi: for on the later lekythoi the hues are different, less simple, childish and gay; less pleasing, as Riezler admits, but also less easy to appreciate on the fainter and more damaged originals.

The text, full and well arranged, gives the best account we have of white lekythoi as a whole. It does not compete with Fairbanks' valuable treatise, *White Athenian Lekythes*, for it does not aim at supplying a complete and ordered list of all the extant examples; but it gives careful consecutive discussions of the general questions raised by this group of vases; their use, subjects, and technique, their documentary value, relation to red-figured ware, and place in the world of art. One of the most difficult and most important tasks of the interpreter is to distinguish the dead from the living. Riezler treats this question at some length and to good purpose: he suggests general rules, but warns against their blind application. A like difficulty is sometimes found in discriminating mistress from servant. Riezler considers that the coiffure is a good test: the woman who has short hair, or conceals her hair beneath a success, is a servant: I find it hard to accept this test, the seated woman, on B. M. D 37 (B. A. V. Pl. 1) wears such a success, and yet is clearly the mistress. It must also be observed that of two women, the woman who is making herself the more useful is not necessarily a servant: she may be a daughter.

Interesting are the sections which compare and contrast the green relief and the grave lekythos, and the white lekythos and the red-figured vase: these sections contain a number of happy observations, but the writer's eagerness to defend the white lekythos against the charge of being a relatively cheap and common product has led him to some

exaggerated expressions. It is true that the nature of the instrument used expressed the strongest influence on the character of red-figured vase painting, and the *kind of influence* is described by Riezler aptly and well: true, also, that the influence of monumental painting on these lesser artists was not always wholly beneficial; but Riezler rates too highly the freedom conferred on the painter of white lekythoi by his more amenable instrument and his peculiar range of subjects. It is not true to say that the white lekythoi show more personality, so that we can assign them with confidence to individual painters, whereas the red-figure vases can only be divided into large groups called 'workshops.' No one believes any longer in a severe style dominated by four cup-painters, "Kupfermaler," Douris, 'Hieron,' and 'Brygos,' or a free style tyrannized over by—either the great, or the little Polygnotos. The intricateness of the instrument or material need not be a bar to the expression of personality; or else a chalk drawing of Michelangelo would show his personality clearer than the Notte: I see there is a sense in which that may be said, and in the same sense we can qualify red-figure painting as *Kunstgewerbe*, and white lekythos painting as *fr. le Kunst*. But both statements are misleading, for both express but a tiny part of the truth.

The stylistic notes on the several pieces are cautious and good. I only note that the Munich Charon-lekythos Pl. 28 seems to be placed too late.

Riezler raises the question, whether red-figured vase and white lekythos were produced in the same workshop: he concludes that some of the early small white lekythoi were certainly painted by artists accustomed to work in the other technique; that some of the finer and later glaze-paint lekythoi probably were; and that the latest groups probably were not. He proves the association for early small white lekythoi by figuring the two rhydos vases in Berlin, one white and the other red-figured. It may be added, that we possess a great number of small lekythoi both white and red by the same master: enough to cite the following—white, Athens 1986, 1791 (Benndorf, *Gr. u. röm. V.* Pl. 23, 2), 1827 (Fairbanks, Pl. 1, 1), South Kensington (*Burlington Cat.* 1904 Pl. 94, II 35); red, Athens 1272, 1343, 1192, 1648, 1741, 1273, B.M. E 589, E 582. Again, by a second and later master are the small white lekythoi, Athens 1807, 1789, 1857, and the small red-figured lekythoi, Athens 1522 and 1599, and countless others in Athens and elsewhere. Passing to large lekythoi, the splendid late severe white lekythos with Artemis, published by Wulffhauser in *Jahreshefte* 16 (1913), Pl. 2, is the only white-ground vase I know from the hand of the Pan master (*J.H.S.* 32 pp. 354 ff.). And further, one of the best white-lekythos painters of the free style, the author of the masterpiece Riezler Pl. 12, is the same who painted some of the finest red-figured vases of the period.

There are one or two trifling misprints: *Συγγραφεύς*, p. 2; Rhode, pp. 21 and 24; *ἀγασ*, p. 35; Langros for Glaukon Sohn des Langros, p. 58 note 144 (rightly on p. 99); *στάντος* des Polygnot., for *αὐτῶν*, p. 60; Charon for Hieron, p. 103, title of picture. On Pl. 20, the 'three lekythoi' seem to be mislabeled: on Pl. 14, I do not think the Amazon is wearing grooves (p. 97). The same object is sometimes called *Hantse*, sometimes *Sack*. With Pl. 17 compare the Madrid lekythos, Laroux, Pl. 34, No. 299.

In an appendix, Riezler discusses the genuineness of certain lekythoi in London and in Brussels: part of this seems to have been composed in a hurry, and would have been none the worse for reconsideration. One does not speak in that tone unless one is sure of being perfectly correct: Riezler is right in condemning D 56 in the British Museum collection and the 'large lekythos without number,' but the lekythos with the seated warrior is quite genuine, save for some repainting in the faces of the side figures. The lekythos D 24 is genuine, but was until lately repainted, and in its former state merited Riezler's strictures. On the other hand, in the last London lekythos mentioned by Riezler, the 'obolos for Charon' is beyond doubt 'very carefully drawn': but not, I fear, in antiquity.

Binding and type are worthy of a work which will make an epoch in the study of these fascinating relics, and will be a perpetual source of pleasure both to the scholar and to the artist.

J. D. B.

Die Bronzen der Sammlung Loeb. Herausgegeben von JOHANNES SIEVEKING. Pp. 86. 46 Plates, and illustrations in text. München, 1913.

This Catalogue makes a companion volume to the *Loeb Collection of Archaic Pottery* (G. H. Chase, New York, 1908), but surpasses even that anterior work in the number of photographure plates and by the addition of wonderfully printed vignettes in the text. There can be no doubt that the private collector of antiquities performs a great public service by making his possessions available in more adequate form than the national Museums can afford to do. These Bronzes are at present contained in Mr James Loeb's house at Munich. They largely consist of choice pieces from the Forstner Collection: the most imposing of these being the large Eros (Plate 24 = *Formen Süd Ost.* 90) or the Pezision (Plates 17-18 = *Formen* 84). The rest has been added since that time; and the whole series ranges from two or three Egyptian statuettes to Graeco-Roman subjects of conventional type, with some vases and other utensils among which two simple Greek mirror-cases are conspicuous (Plates 38, 39). The pleasing decorative work of archaic style is unusually well represented, but the three Etruscan tripods are reserved for larger reproduction in Brunn-Bruckmann's *Denkmäler*. Dr. Sieveking's text is precisely what is wanted in a Catalogue: short description and sufficient historical and critical comment, with complete photographic illustration.

Bibliographie pratique de la Littérature grecque. By PAUL MASUREL. Pp. 334. Paris. C. Klincksieck, 1914.

A critical bibliography designed to assist young students by pointing a way through the fast increasing masses of literature which illuminate or obscure this subject. By his position as Professor of Greek Literature in the University of Bordeaux the author is well qualified to understand the needs which his work supplies, and although the book is so much intended for French scholars that a sort of apology for the inclusion of foreign editors is inserted in the preface, the result is a useful handbook which deserves wide circulation.

Compte Rendu de la XIV^e Session du Congrès International d'Anthropologie et d'Archéologie Préhistorique. Publié par les soins de W. DEONNA. Tomes I, II; pp. 694, 527. Genève. Albert Kundig, 1913, 1914.

The first volume of this Report of the recent Archaeological Congress at Geneva begins with a commendably brief account of the procedure, meetings, and excursions of the Congress, with the list of Delegates, but is mostly occupied by the text of numerous papers read upon the Palaeolithic Age in Europe. Volume II continues European archaeology from the Neolithic to the Iron Age, and includes a few papers upon African, American and Australian subjects, with some purely anthropological essays. The arrangement of so much diverse material does credit to the method and industry of the editor, and the illustrations are plentiful and clear. All the contributions are in French.

The Journal of Egyptian Archaeology. Vol. I, Parts 1 and 2. Published by the EGYPT EXPLORATION FUND. London, 1914. Each 6s.

The Egypt Exploration Fund is to be congratulated on the appearance of the first two numbers of its new quarterly publication, *The Journal of Egyptian Archaeology*, issued in January and April of this year. A successful future can be predicted for the new journal, which is intended to occupy in regard to Egyptian studies in this country the same place as that filled by the *Journal of Hellenic Studies* with regard to Greek. It is directed by a Sub-Committee of control, consisting of Mr. F. Ll. Griffith, the Reader

in Egyptology at Oxford, Dr. Alan Gardiner, Capt. H. G. Lyons, Mr. J. G. Milne, and Mr. H. B. Hall, of the British Museum. The names of the contributors to the first two numbers are equally a guarantee of excellence: we find among them, besides the directors themselves, Profs. Naville, Sayce, and Petrie, Mr. Hogarth, Prof. A. S. Hunt, and Messrs. L. W. King, H. Idris Bell, and M. N. Tod. Prof. Hunt's article on "Papyri and Papyrology" in the April number is really a model of what such an article, designed for the use both of those who know and of those who do not know, should be. We understand that especial prominence will always be given in the new journal to classical connexions with Egypt, to the Græco-Roman period, and to papyrology, as is fitting in the organ of the society that has done so much to rescue priceless treasures of classical literature from the sands of Egypt. We expect, too, that Minoan-Egyptian connexions will by no means be ignored and find an article on this subject by Mr. Hall. Mr. Tod gives us a bibliography of Greek inscriptions lately found in Egypt. The bibliographies, inherited from the old *Archæological Report* of the Fund, which now comes, are a most useful feature.

. The following books have also been received:—

- The Kings of Lydia, and a Re-examination of some Fragments from Nisakura of Hieroglissa.* By LEVIN ALEXANDER. Princeton University Press, 1913.
- La Politique monétaire d'Athènes au V^e Siècle avant notre Ère.* By E. BABELON. Rodière et Foucard, 1913.
- De l'Apogée social en Latin antique, et particulièrement dans Terence.* By D. BARRELESSET. H. Champion, 1913. 12 fr.
- De la Phrase-Verbe Être dans l'Ionien d'Hérodote.* By D. BARRELESSET. H. Champion, 1913. 4 fr.
- The Eastern Lighthouse.* By ORR BATES. Macmillan, 1914. 42s.
- A History of Greece to the Death of Alexander the Great.* By J. R. BURY. Macmillan, 1913. 8s. 6d.
- Intermediate Types among Primitive Folk.* By EDWARD CARPENTER. George Allen, 1914. 4s. 6d.
- The Primitive Text of the Gospel and Acts.* By A. C. CLARK. Clarendon Press, 1914. 4s.
- Le Consul Jean Gualini et sa Relation de l'Attique au XVII^e Siècle.* By M. COLLIGNON. C. Klincksieck, 1913. 2 fr. 60.
- The Origin of Attic Comedy.* By F. M. CORSTON. Arnold, 1914. 8s. 6d.
- De Veterum Messuriis.* By G. L. DUNHAM. Topelmann, 1914. M. 2, 50.
- Ein athenisches Gesetz über die domäische Aparche.* By A. ECKER. Marcus and Weber, 1914.
- Les Mythes d'Éléus.* By P. FOUCAUT. Picard, 1914. 10 fr.
- Romish Impressionism.* By TENNEY FRANK. Macmillan, 1914. 10s. 6d.
- Adonis, Attis, Osiris. Vols. I, II.* By J. G. FRAZER. Macmillan, 1914. 20s. net each.
- The Principles of Greek Art.* By PERCY GARDNER. Macmillan, 1914. 10s.
- Mélanges Hollenès.* Picard, 1913. 15 fr.
- Symmetrie von Kinetik.* By W. W. JASSER. Weidmann, 1914. M. 3.
- De Concordantiis apud Antiquos Græcos et alios Ubi.* By J. KÜCHLING. Topelmann, 1914. M. 3, 40.
- Die neuen Responsionsfreisheiten bei Buchplaten und Platten.* By P. MAAS. Weidmann, 1914. 80 Pf.
- The House-Div in the Ancient Stage.* By W. W. MOONEY. Williams and Wilkins, 1914.
- Archæology of the Old Testament. Was the Old Testament Written in Hebrew?* By E. NAVILLE. Robert Scott, 1913. 2s.
- Recherches sur le Travail d'Art et d'Artiste de Plastique.* By L. PARMENIER. Lamertin, 1913.
- Das Platon Werkverzeichnis.* By M. PUESE. Weidmann, 1913. M. 10.

- Essays and Studies Presented to William Ridgeway.* Edited by E. C. QUINN. Cambridge University Press, 1913.
- Catalogue des Antiquités égyptiennes de Koptos.* By A. REISACH. Bertrand, 1913.
- Not Sempiternus: Étude sur le Déluge en Phrygie et le Séméiosisme phrygien.* By A. REISACH. Durlacher, 1913.
- Ancient Eugenics.* By A. G. ROSEN. Blackwell, 1913. 2s. 6d.
- The Composition of the Iliad.* By AUSTIN SMITH. Longmans, 1914. 4s.
- Ueber die vorgriechische lineare Schrift und Krete.* By J. SUNDWALL. Helsingfors, 1914.
- Panama in Olynthia.* By A. TERNOWSKA. Weidmann, 1914. M. 3.
- The Acharnians of Aristophanes, with an English Translation.* By R. Y. TUCKELL. Clarendon Press, 1914. 1s. net.
- Les Égyptiens de la Bible hébraïque au Grec et au Latin.* By M. VERNIS. Leroux, 1914. 7 fr. 60.
- The Hellenica Oxyrhynchia: Its Authorship and Authority.* By E. M. WALKER. Clarendon Press, 1913. 5s. net.
- Aus dem griechischen Scholasten Eudemos von Milet und Peripatetik.* By E. ZIEGLER. Teubner, 1914. M. 5.

(CORRIGENDUM. (Vol. XXIII. p. 142.)

PEREGRINI: *Catalogo dei vasi greci dipinti delle Necropoli Etrusche.* The reviewer wishes to apologise for the following misprints or mistakes: 273 and 274 should be read instead of 293 and 294; and 436 instead of 442.

A538
80

THE MASTER OF THE ACHILLES AMPHORA IN THE VATICAN.

[PLATES XIII-XVI.]¹

THE two vases reproduced on Pl. 13 and Pl. 14. 2 are the earliest red-figured lekythoi on which a grave-stele is represented. Shape and patterns and composition are the same in both; and if we compare the drawing of legs, arms, heads, and feet in the two vases, we shall find the closest resemblances. Now put the legs of the youth on a third lekythos (Fig. 2) beside the male legs on the two stele-vases; and the woman on Pl. 13 beside the standing women on a fourth lekythos, Pl. 14. 1, and a fifth, Fig. 3. Then let us turn to the Nolan amphora on p. 183, Fig. 4; surely the youth on *A* is strangely like the two youths and the man on our lekythoi; and now look at the figure on the reverse of the vase (Fig. 5(1)): have we not seen that himation before? and where if not in Pl. 14. 1 and Fig. 3? But no fewer than fifteen such himatia are collected in Fig. 5: each of the fifteen figures who wear them is the "mantle-figure" drawn on the back of a vase. Would it not be interesting to know what the figures on the front of these vases were like?

But at this point some reader may cry: of course these himation figures are as like one another as, short of repetition, fifteen figures could be; but they are mantle figures, and all mantle figures are very much the same: I never look at mantle figures. In answer to this objection, once I have referred the objector to the story of Peter's sheet, I am at a loss: for although I can collect on two pages fifteen mantle figures which are *like* one another, I cannot collect on two others all mantle figures which are *unlike* these fifteen: I can only bid the critic go and look at a roomful of red-figured vases. If he finds any other vases with the same figure on the back I shall be glad to hear of it: for if I turn to the front I shall find that legs, feet, hands, face, clothes are drawn in the same way as on the vases already mentioned, and on the other vases in the list I shall presently submit.

¹ I wish to express my thanks to Mr. L. D. Caskey, Dr. F. C. Conybeare, Prof. J. De Mot, Mr. D. G. Hogarth, Dr. Koeter, Dr. Orsi, Mr. E. Petting, Dr. Sievers, Mr. A. H. Smith, Dr. Scals, Dr. Tien, and Dr. Waldhauer, for their kindness in allowing me to publish vases in Boston, Brussels, Oxford, Berlin, Syracuse,

Paris, Munich, London, Athens, Dresden and Petrograd. The drawings Pl. 13-16 are by Mr. F. Lambert; Pl. 14 by Mr. E. Gilliéron; Figs. 4 and 5 by Mr. Terzi; Figs. 15, and 5m, by Prof. Reichhold; Figs. 2, 14 and 21 by Mr. Ramate Carta.

To take two examples; No. *q* in Fig. 5 comes from the back of a Nolan amphora in Boston; let us look at the front of the vase, shown in Fig. 7, and compare the drawing of legs and feet with that on Fig. 2; or pass to Fig. 8, which is the other picture on the pelike from which No. *e*



FIG. 1.—AMPHORA OF THE VAIDAN.

on Fig. 5 is taken; and observe the feet of Nike, and the left leg of the warrior. Now look at another Nike and warrior scene, on a large lekythos

(Fig. 9): is it only by chance that the warrior here is so like the warrior on the pelike?

This lekythos points us to a still larger vase, the stamnos figured on Pl. 15-16: here are two warriors, very brothers of the warriors on the lekythos and the pelike. The well-known Euphorbos vase in Paris (Fig. 10) is more elaborate, and the inner markings on it are all in black, instead of being partly in black, partly in brown: but the lines on the legs are of the type we have already noticed, and the face is the same face, seen at its best, as appears in smaller vases like Pl. 14.1. If we turn this vase round (Fig. 6), we



FIG. 2.—LEKYTHOS IN DR. F. C. CONTESSA'S POSSESSION AT OXFORD.

find a mantle figure which, though larger, differs very little from the mantle figures we have already seen. Finally, the most careful work of all, the Achilles amphora in the Vatican (Fig. 1). I am unable at present to enter a good reproduction of this vase, for it has never been properly published: if it had been signed by a painter or a potter, if it had presented a curious myth, it would long ago have received adequate or tolerable treatment: but it is only a beautiful vase, decorated by a nameless artist. Happily, before

very long we shall have a good reproduction of the Achilles amphora, for it has been drawn by Reichhold and is to be published presently in the German book.²



FIG. 3.—LEKTYKH IN SYRACUSE.

Let us notice here the knees, the feet, the clothes, the ears, the

² Dr. Hamer kindly told me that the Achilles amphora and the Euphrosyne vase will

be reproduced on one plate in a future number of PHIL.

eyes, and compare the whole vase with the Euphorbos vase, and with the other vases already indicated: I think it will seem likely that they are all by one hand. I wish to call the painter 'the master of the Achilles



FIG. 1.—NOLAN AMPHORA IN THE BRITISH MUSEUM, E 929 (A).

amphora,' or for short, 'the Achilles master.' I shall propose a list of this painter's works, and after that mention some features which are common to them and as a whole distinguish them from other works of the early free period.



(a) PETROGRAD 1536 Sr.



(b) DUBLIN 2310.



(c) B.M. E 335.



(d) B.M. E 331.



(e) B.M. E 330.



(f) PETROGRAD 710.



(g) OUDERHILL PARAVY.
(After *At. Chr.* 3, Pl. 20.)



(h) DUBLIN 2347.
(After *Jehn.*)



(i) PETROGRAD 767.



(a) B. M. E. 829.



(b) Museum 2329.



(c) Berlin 2332.



(d) Boston inv. 03.517.



(e) Dresden 815.



(f) Boston inv. 06.247.

FIG. 5.—REVERSE FIGURES (continued).

I. Amphora.

I. Vatican. *A*, Fig. 1 = phot. Mosconi 8573; *Mus. Greg.* 2, Pl. 58, 3; Gerhard, *A.F.* Pl. 184 (miserable reproductions). *A*, Achilles. *B*, Woman with oinochoe and phiale. On *A*, AXIAAEVΞ.

There are two main classes of *rf.* amphora,³ distinguished by the shape of handles and foot. The first class has flat handles with flanges, the edges of the flanges being decorated with *bf.* ivy pattern; and a foot of two degrees resting on a cushion (e.g. *FRH.* 2, p. 282, and 3, p. 73; *J.H.S.* 31, p. 276). The second class has the same handles and foot as the 'amphorae of Panathenaic shape,' that is, black cylindrical handles and a simple spreading foot without cushion. Both forms of amphora are used by *bf.* potters, but in *rf.* pottery it may be said that as a rule the first class is the earlier, the second the later. Our amphora belongs to the second class and is one of the few free-style amphorae, for this shape, common in the early and

³ By the word 'amphora' unqualified I mean the shape *Furtw. Cat.* Pl. 4, No. 35, either with such foot and handles as are there shown, or with the foot and handles described above.

developed severe periods, gets rarer as the century advances, and long before the century passes disappears.

The decoration of our amphora consists of a single figure, standing on a band of pattern, at each side of the vase, and a row of tongues round the base of the handles. The amphorae of the earlier severe period, and many of the later amphorae, have frames of pattern all round the pictures; but we possess a good number which have either a band of pattern both above and below the picture, or, like our amphora, a band of pattern below the picture only.* Ours is the only amphora which has no more than a single figure on each side. The drawing on *A* is wonderfully careful and fine, on *B* careful but less elaborate.

If we look at the pattern on *A* in Mosconi's photograph we see that it is composed of stopped maeanders, each of five pieces, grouped in pairs with saltire-squares in such a way that the groups of maeander face alternately left and right, and the saltire-squares touch alternately the upper and lower boundary lines of the border. On *B* the pattern is the same, except that cross-squares of an uncommon kind, like Dourian cross-squares but with dots added between the branches of the cross, are substituted for the ordinary dotted saltire-squares used on *A*.

These two alternations, groups of maeander facing alternately left and right, and pattern-squares depending alternately from the upper and the lower of the horizontal lines bounding the pattern, are the rule in our master's maeander-and-pattern-square ornament, and I therefore beg permission to use the symbol δ as an abbreviation for the longer expression 'groups of maeander facing alternately left and right with pattern-squares depending alternately from top and bottom': I shall add in each case the number of maeanders in each group and specify the kind of pattern-square: the pattern on *A* of our amphora will then be ' δ 2's saltire-squares.'



FIG. 6. — GREEK AMPHORA WITH TWISTED HANDLES IN THE CABINET DES MÉDAILLES, 372 (B).

The youth on *A* has the name *Achilleus* written against him, and I cannot agree with Reinach in regarding him as a nameless and typical

* E.g. both above and below, the Berlin amphora 2100 (*J.H.S.* 31, Pl. 12-15); below only, FRH. Pl. 113 and 104.

figure transformed into Achilles by a fancy of the artist.⁵ Reinach means, I take it, that the artist first drew a youth in armour, and when he had drawn him thought he would make him more interesting by putting a name to him; but suppose the artist had meant from the beginning to draw a picture of Achilles, how would the picture when finished have differed from the picture before us? How should the artist characterize Achilles but by pride and beauty? Let us take our artist's word that the young man he drew is Achilles; and if we take into account the writing on the vase which Oltes painted many years earlier,⁶ we shall think it likely, though by no means certain, that the lady is Briseis.



FIG. 7.—NOLA AMPHORA IN BOSTON (A).

II. Neck-Amphora with Twisted Handles.

2. Cabinet des Médailles 372. Figs. 10 and 6. *Mon.* 2, Pl. 14: W.V. 1889, Pl. 8-9: phot. A, Girandon. A. Euphorhos carrying the infant Oidipous. B. Man with stick. On A, ΕΥΦΟΡΒΟΣ and ΟΙΔΙΠΟΔΑΕ.

Mouth and foot in two degrees, as is usual on neck-amphorae with twisted handles (shape, *Fortw. Cat.* Pl. 4, No. 37). The body of the vase is slimmer and the neck thinner than in severe neck-amphorae with twisted handles (e.g. *J.H.S.* 31, p. 281); the more elegant proportions are regular in the free style examples. Mouth, neck, and foot are covered with black, and the upper edge of the mouth is also black. The decoration consists of a

⁵ Reinach, *Revue* 2, p. 91, 'il s'agit

probablement d'une scène de départ, où l'inscription Αχιλλεύς est une fantaisie du

céramiste.'

⁶ E.M.E. 258 (Gerhard, *A.P.T.* 187)

single figure (for the group on *A* must count as such) on either side of the vase, with a band of pattern below it, and a single palmette at each handle. The drawing on *A* is excellently fine, on *B* careful but simple. A great many other neck-amphorae with twisted handles have only a single figure on each side, but the latest of these is the Würzburg vase with Poseidon (Gerhard, *A.V.* Pl. 11, 1): all the free style examples, except ours, have two figures or more. The pattern below *A* is δ 3's with Dourian cross-squares; below *B*, δ 3's with saltire-squares. The outline of the hair on *B* is



FIG. 66.—PRIZE IN THE BRITISH MUSEUM, E 835 (*A*)

not incised (de Ridder, *Cat.* p. 272) but reserved. The scene on *A* is unique.

III. Pointed Amphora.

3. Cabinet des Médailles 357. *Mous. Piot* 7, Pl. 2-3 and pp. 14-15: FRH. Pl. 77, 1 (detail = our Fig. 11) and p. 92: phot. Giraudon. Dionysos, Maenads and Silens.

On the mouth, egg-and-dot like that on the R.M. stamnos, Fig. 24: on the shoulder, cf. palmette motive; handles twisted, at the base of them

egg-and-dot. Above the picture, egg-and-dot; below it, δ 2's with saltire-squares (wrong in the pictures). Most of the numerous restorations are indicated in the French drawing, but it must be added that the face of Dionysos and the top of his head are also repainted.

Not more than half a dozen Attic *rf.* vases of this shape have been preserved;¹ and one of these, the magnificent Kleophrades vase in Munich, has the same subject as ours, Dionysos in the midst of his silens and maenads. Kleophrades' vase is the earlier by a good fifty years: let us move aside for a moment to compare it with the Achilles-master's. The first has the eager strength of the early, the second the calm power of the mid fifth century. The



FIG. 35.—FROM PELIKE IN THE BRITISH MUSEUM, E 355 (4).

first has two memorable figures, the rushing maenad who clutches her thyrsos, taut with passion, and the other, the blond and blue-eyed,² who is rapt into some solemn heaven: the second, no less memorable, but far different, a group of two friends, one slighter and weaker in body, a little tired, but determined, the other, great, strong, and loving. I do not know of any group quite like

¹ (1) Munich 2334: FR. PIL 44-45: by Kleophrades (see *J.H.S.* 30, p. 43). (2) B.M. E 350: *B.M. Cat.* 3, Pl. 13 and 18, 1. (3) Brussels: Noël des Vergers, *L'Étranger*, Pl. 22-26. (4) Munich 2245: FR. PIL 94-95. (5) replica of the last, Berlin 2165: Gerhard, *Abt.* v. Kerp., 17, Pl. 28-29. No. (1) is somewhat

earlier than the rest, which all belong to the same few years: then comes a gap, and then our Paris vase.

² I think the dot and circle eye is meant, if not always, at any rate often, to indicate a light-coloured eye.

this on Attic vases: in feeling it recalls the male group on the Berlin Orpheus krater;⁹ but formally, it stands alone.¹⁰ Did the vase painter invent it, or did he take it from some monumental work by a great artist? I fancy he did not invent it. And are not Kadmos and Teiresias, in Euripides'



FIG. 9.—LEKYTHOS IN THE LOUVRE, G 444.

best play, setting out, arm in arm, dressed in women's clothes, to do Dionysos honour, a hideous parody of such a pictorial group?

⁹ Furtwängler, *Reclame Griechische Vasenmalerei* 1899 (= *VRH.* 3, p. 100; Bueche, *et. Paumgartner*, p. 185); see the comments by Furtwängler, *loc. cit.* and Hauser (*VRH.* 3, pp. 108-109.)

¹⁰ We do not find the same feeling or the same composition either in the earliest early groups of two persons moving in the same direction with their arms round each other's necks (e.g. Ionia amphora in Würzburg, *J.H.S.*

19, Pl. 5; Attic *id.*, amphora in Madrid, Lorenz, *Cat.* Pl. 10; Attic *id.*, amphora by Phintias *VRH.* Pl. 91; amphora by 'the master of the Teles hydra' (*J.H.S.* 82, p. 171; Gerhard *A.P.* Pl. 126)); nor in the later Dionysos groups (e.g. *Mon.* 16, Pl. 3); nor yet in the free style groups of small Silen and drunken Dionysos or Hephaistos (pelike in Munich *VR.* Pl. 29; *sinochoi* in Athens *E.C.H.* 1895, p. 28).

One of the two silens on the Paris vase is almost entirely destroyed, but enough is left of him to show that he was behaving quite well; as for the silen who remains, he might be a priest, or at least a very grave acolyte, who feels he is playing an important, perhaps the most important part in a solemn rite: but the silens of Kleophrades are huge half-wits, or wild-beasts: the night is filled with heat, fury, and shouting; and the musician blows to crack his cheeks.

IV. *Pelikai*.

Not large. Handles ridged, with a palmette, petals downwards, at their bases. Side of foot black. On *A*, two figures, on *B* one. Above and below *B*, a band of key pattern: above and below *A*, a band of δ with saltire-



FIG. 10.—NECK-AMPHORA WITH TWISTED HANDLES IN THE CABINET DES MÉDAILLES (372)

squares, on δ in 2's, on 4 in 3's. This pair of pelikai belongs to a small group of pelikai by different hands; the other members are rather later than our pair.¹² The pelike in Deepdene (*El. Cer.* 1, Pl. 94), with Nike setting up a trophy, has exactly the same handles, palmette, and patterns as the Berlin pelike, but the drawing cannot be said to show trace of our master's influence.

¹² e.g. Deepdene, *El. Cer.* 1, Pl. 94: B.M. E 415; B.M. E 323; B.M. E 384, Munich 2362; Knustgowermuseum (A. Silen and Maenad: A. youth); Berlin 2334, *A.Z.* 1870, Pl. 11; Dresden,

4. Berlin 2355. Fig. 12. Overbeck, *Gall. lap. Bilibio* 2, 1. A. Oedipous and the Sphinx. B. Man with spear.

5. B.M. E 385. Figs. 8 and 5c. A. Nike and young warrior. B. Man with stick.



FIG. 13.—FROM PICTURED AMPHORA IN THE CABINET DES MÉDAILLES, 367.
AFTER F.-R. Pl. 57, 1.

V. Nolan Amphorae.

Handles: 5 bis, 6, 7; triple handles: 8-20, ridged handles.

Foot: the edge reserved in 10, 13, 14, 16, 17, 18 bis, 20; black in the rest.

Patterns:

Below *A* = 5 *h*'s, 6 and 9-20, δ 3's saltire-squares;²² 8, δ 2's saltire-squares; 7, stopt meander in 2's with Dourian cross-squares.

Below *B*; key, all except 7, which has the same pattern below *B* as below *A*, but more irregular and even rougher.

The patterns on 15; and on *B* of 20, are not known to me.

No palmettes at the handles.



FIG. 12k.—PALMETTE IN BERLIN, 2355 (4).

The scheme of ornamentation, on *A*, δ , on *B*, key, is found on a good number of Nolan amphorae of later style than our master's, no doubt owing to his example. Before his time, δ is not found on Nolan amphorae except on works by the Berlin master and his school, and by Hermenax who was a pupil of the Berlin master.

²² On 10, the 4 principle is not carried out. The best of these vases are Nos. 5-14 and 8; many of them are lousy and poor.

(A) With triple handles:

5. 6a	Petrograd 1536. Stephani	Figs. 23 and 24; (A) <i>Compte Rendu</i> , 1863 p. 43 n.	Narciss riding on dolphin	Youth with stick
6	Leiden 18 h 41	—	Eos	Youth with stick
7	Berlin 2332	(B) Fig. 5a	Young warrior running ΑΛΚΑΙΟΣ	Man with stick ΚΑΛΟΞ

No. 7 is the only vase with the love name Alkaios.¹²

(B) With ridged handles.

8	B.M. E 329	Figs. 4 and 5f	Youth and woman with sarcophagus	Man with stick
9	Paris, Petit Palais 325	—	Dionysos and trader	Youth with strigil ¹³
10	Syracuse	(A) Fig. 13	Nike and youth	Man with stick
11	Münch. 2329	Figs. 15 and 5a	Youth giving lyre to boy	Man with stick
12	Boston inv. 06.2447	(A) <i>Am. J. A.</i> 15 (1911) p. 289. Figs. 7 and 5g	Oedipos and sphinx	Youth with stick
13	B.M. E 331	Figs. 16 and 5d	Eos and Kephelos	Man with stick
14	B.M. E 329	Figs. 17 (part) and 5c	Eos and Kephelos	Man with stick
15	Once coll. Paravey	<i>El. Cér.</i> 3, Pl. XX = Figs. 18 and 5g	Zeus pursuing woman	Man with stick
16	Dresden 308	(A) Fig. 19	Zeus pursuing woman	Man with stick
17	Berlin 2340	(B) Fig. 5a	Peless and Thetis	Man with stick
18	Berlin 2347	Jahn, <i>Zeitschrift der Europ.</i> , Pl. 16, B only; Fig. 5a (from Jahn).	Europa	Man with stick
19	Petrograd 710 (1558 St.)	Figs. 13 and 5f	Youth and boy with lyre	Youth
20	Dresden 315	(B) Fig. 5g	Youth with spear and old man	Woman with hair
20	Once in Paris mar- ket	(A) <i>Cat. Coll. Dr. R. et M. Choisy</i> 19-21 nos. 1910, Pl. XX, No. 171.	Oedipos and sphinx	* Figure draped *

A group of five Nolan amphorae with *triple* handles are by an imitator of our master.

7a. Vicenza Hofmuseum 499. Laborde, *Vases de Lambery* 2, Pl. 33 and 32, 3. A. Eos and Kephelos. B. Youth.

7a bis. Petrograd 703 (1534 St.). A. Woman running. B. Youth.

7b. Cab. Méd. 363. Laynes, Pl. 23; *El. Cér.* 3, Pl. 7. A. Poseidon running. B. Youth. On A. ΚΑΛΟΞ ΜΕΑΗΤΟΞ. The only occurrence of this love-name.

¹² It is true that Alkaios has been tried on a Nolan amphora with Zeus and Ganymede in the collection of Mr. Ricketts and Mr. Shannon (*Cat. Burlingtons Club* 1904, Pl. 92, p. 102). But the inscription on that vase reads not ΑΛΚΑΙΟΣ but ΛΥΙΟΣ ΚΑΛΟΣ: it is the work of an anonymous master belonging to the developed severe period, who for some reason frequently writes ΛΥΙΟΣ on his vases; among his other works are the two cups B.M. E 75

and E 76 (Hartwig metr. Pls. 42, 2 and 43, and Pl. 41 and 42, 1): two neck-amphorae with ridged handles, B.M. E 349 and Boston inv. 01.0028; and the cup Louvre G 255.

¹³ 1. Diskobolos standing 1, arms extended with diskos; 2. man standing right leg frontal, head 1, 1 arm wrapped in himation, in r. hand sprig of wheat (the prongs fork-shaped). 3. youth standing 1, himation, r. arm extended holding strigil.

7c. Berlin. *A.* Eos and Kephales. *B.* Youth. On *A.* ΚΑΕΝΙΑΞ ΚΑΑΝΞ. Formerly in the Bourguignon collection: Klein, *liebl.* p. 163, No. 2.

7d. B.M. E 300. Klein, *liebl.* p. 164. *A.* Youth riding. *B.* Woman. On *A.* ΚΑΕΝΙΑΞ ΚΑΑΝΞ. Klein's No. 4.

A fine lekythos (our No. 22) from the master's own hand also bears the name of Kleinias. Klein mentions two other Nolan amphorae which I have not seen: Naples 3125, his No. 1, and his No. 3, seen by Heydemann in Rome, and reported to be of the same size and style as the Berlin Kleinias vase.

7a has the patterns which are regular on the Achilles-master's Nolan amphora: below *A.* δ 3's saltire-squares; below *B.* key: 7a bis the same patterns, but the δ in 2's. The key is also used on *B* of 7b: on *A* of 7b, and on both sides of 7c and 7d, a running meander.

The following Nolan amphorae with *ridged* handles stand very close to the master, but are not I think from his own hand. Patterns: 20a, below both *A* and *B.* δ 2's. Dourian cross-squares: 20 b, below *A.* δ 3's saltire-squares; below *B.* key. 20 a has a double palmette at each handle.

20a. Girgenti. Baron Giudice. *A.* Zeus pursuing woman. *B.* Man with stick. *A.* 1. Zeus running r., in r. sceptre, l. arm extended. 2. Woman running r. regardant, left hand raised. *B.* Man standing l., himation, in r. stick.

20b. Copenhagen. *A.* Zeus pursuing woman. *B.* Man with stick. *A.* 1. Woman running l. regardant: 2. Zeus running l., in r. thunderbolt, in l. sceptre across shoulder. *B.* Man standing r., $\frac{1}{2}$ back view, himation, in r. stick.



FIG. 12b.—PIRATE IN BERLIN, 2355 (B).

VI. Lekythoi.

Elegant shape, black neck, and nick on the side of the foot. Shoulder bf. with egg-pattern and three carefully drawn palmettes: with the excep-

tion of 22, which has *cf.* palmettes, and 21, which has a second scene on the shoulder. Patterns: above the picture: δ 2's saltire-squares, 21, 27: δ 3's saltire-squares, 29, 30, 32, 33: δ 3's with a modification of the Dourian cross-square (the black corners voided), 28: δ 3's saltire-squares from top and Dourian cross-squares from bottom, 22: dense stopt meander 3's with saltire-squares from bottom, 24, 25, 26: stopt key, 23.

Below the picture: key, 24, 25, 26, 27, 28, 29, 30, 31, 32: δ 2's Dourian cross-squares, 21: δ 4's Dourian cross-squares, 22: clamp pattern, 33: hook pattern, 23.



FIG. 12.—NOLAN AMPHORA IN PETROSOKAN, 716 (A)

21. Louvre G 444. Fig. 9. Nike moving towards warrior. On the shoulder, a second picture; the upper parts of the figures on the shoulder, together with neck and mouth of the vase, are lost:—1. Male moving *r.*, with stick; behind him, a chair: 2. Woman moving *r.*, *r.* leg frontal, in *r.* hand oinochoe; on the ground, a bird: 3. legs of male, standing *l.*, *l.* knee bent, with stick; on *r.*, a woolbasket: 4. Woman standing *l.*

This is one of the largest and finest *cf.* lekythoi we possess. It is distinguished from the great majority of lekythoi not only by its size but by

the secondary picture on the shoulder. Only eight other lekythoi have such secondary pictures;¹⁰ besides these, a few lekythoi have the picture on the



FIG. 14.—NOLAN AMPHORA IN STRACONNE (d).

shoulder only, the body being left black except for a band or two of pattern.¹¹ None of these thirteen lekythoi have more than two figures on the shoulder.

¹⁰ (1) Berlin 1882 (white-ground), *A.Z.* 1880, Pl. 11 and *Riesler* Pl. 1: Eros between palm-trees. The rest red-figured. (2) Athens, Acropolis, fragment: lion and bear. (3) Bologna Palagi-Univ. 821, *Pellegrini, Cat. Pign.* 43-45: lion between palm-trees. (4) Athens 1828, *Collignon-Guivé*, Pl. 46, signed by Mys: two Nike (and a third Nike on the neck). (5) Syracuse, inv. 17, Pl. 15, 2, by a follower of the Berlin master: Pegasus between

palm-trees. (6) Cat. Mdl. 189, phot. *Gimdon*, by Hermenax: woman running between flowers: this is the only lekythos where the figure on the shoulder is related to the figure on the body: the woman is Zeus's lover. (7) Syracuse 18280 (free style): Pegasus between palm-trees. (8) A lekythos in Naples (*Hedemann* 2184), which I have not seen: it is mentioned by *Riesler*, p. 39, note 1: Nike.

¹¹ The following v.-f. lekythoi have pictures

22. Syracuse. Fig. 20. *Mon. Line.* 17, Pl. 8. Artemis and a woman untying her girdle. ΚΑΕΝΙΑΣ ΚΑΛΟΣ ΠΗΔΙΟC.¹⁷



FIG. 12.—SOLAR ARTEPHORA IN MUSEUM, 2329 (J).

23. Athens 12480. Pl. 14. I. Phot. Alinari 206. Woman bringing a bird (dove ?) to a woman sitting on a rock.

on the shoulder only, (1) Munich 2475 (severe); illus. The rest five styles. (2) B.M. inv. 1910, 4-30. 1: youth and woman with alabasteron. (3) Syracuse; woman with phiale and youth with spears. (4) B.M. inv. 1909, 4-6. 1: Eros. (5) B.M. inv. 1909, 4-6. 2: woman.

¹⁷ The *lover-name* Kleinias is found on five other vases (Klein *loc. cit.* pp. 102-104); four

of these are dealt with on p. 195. Klein's No. 5 belongs to the same period but has no connexion with our master. If the Kleinias on the Oxford vase is, as seems likely, the same as the Kleinias on the Syracuse vase, he cannot be, as has been suggested, the father of the great Alkibiades; for the father of that Kleinias was an Alkibiades, not a Pedieus.

24. Brussels A 1378. Pl. 13. Poor photograph, *cat. vente Somzée*, Pl. 7, No. 49. Youth and woman at stele.

A list of *cf. lekythoi* with grave-scenes has been drawn up by McMahon.¹⁸

25. Athens 1639. Pl. 14. 2. Man and woman at stele.

26. Oxford 324. Fig. 21. *J.H.S.* 1891, Pl. 13, p. 317: Gardner, *Ashmolean vases*, p. 32. Aphrodite riding on a swan.



FIG. 13.—NOLAN AMPHORA IN THE BRITISH MUSEUM, E 341 (*J*).

27. Oxford. Dr. F. C. Conybeare: lent by him to the Ashmolean Museum. Figs 2 and 22. Youth shaking hands with woman.¹⁹

¹⁸ *Am. J. A.* 19, p. 411. McMahon divides them into three groups: (i) a group centring round and deriving from our No. 33; (ii) a group of three; (iii) a later group of five. I agree with his grouping in the main and would rearrange the vases in the following order and with some additions: (i) our four *lekythoi* 21, 25, 32, 23, by the Achilles master; our No. 33 a, school of the Achilles master, or by himself; our Nos. 33 f, 33 g, 33 h, 33 i, imitations of the Achilles master; Athens 1657, a later example, showing the influence of our master in the shape of the vase and the type of the palmettes, but hardly in the drawing; (ii) McMahon's second group: Athens 1639, 1298 and 1299, all by a single unguited hand; (iii) three vases by a single hand: Athens

12804 and two in the Louvre (woman with toy and youth with spear at stele, perhaps identical with McMahon's 'Orestes and Electra' *lekythoi*; and naked youth with *diskos* and youth in himation); (iv) two small *lekythoi* by a single hand, Berlin 2426 (Furtwängler, *Germ.*, *Schöneweg*, text to pl. 15), and Berlin 2427. I have not seen the *lekythos* 'in the Paris market' mentioned by McMahon.

¹⁹ From Gela, bought in Palermo. Both faces here suffered: the end of the youth's nose is gone, and part of the woman's eye; the surface of the youth's chest is rubbed, so that the nipple may have been indicated, although no trace of it remains; small pieces of the woman's himation are missing, in the overfall and in the folds to the right of the left leg.

28. Boston, inv. 01.8077. Zeus pursuing woman. 1. Zeus moving r. in r. horizontal sceptre, l. arm extended: 2. Woman moving r. looking back, thin chiton with kolpos, short himation.

29. Syracuse. Fig. 3. Two women.

30. Syracuse 19894. Fig. 23. Niké and youth.

31. Syracuse 21133. *Mon. Line.* 17, p. 397. Young warrior pursuing woman.

32. Athens 1293. Youth riding to grave stele.

33. Athens 12123. *Ann. J. A.* 10 (1906) Pl. 17, and pp. 410-411. Youth leading horse to stele.



FIG. 17.—FROM NOLAN *APHRODISIAS* IN THE BRITISH MUSEUM, E 829 (A).

Lekythoi, School-pieces and Imitations.

33a. Once in the Munich market. *Katalog . . . einer . . . Sammlung griechischer Vasen . . . München, Helbig, 1-2 Mei, 1899, No. 69.* 1. Man leaning on stick, with 'Mantel und Reissstut.' Stele, bound with white and red tainia, a shield leaning against it. 2. Man standing l. in r. hand stick. Height 50. Above, 83a saltire-squares; below, key. I could not be certain from the photograph whether this large lekythos was by the master himself or by an imitator.

33b. Syracuse. *Mon. Line.* 17, p. 366. Woman running (type of Thetis, Oreithya, etc.).

33c. Athens 1204. Woman running (same type). Above, 83's saltire-squares; below, 2's saltire-squares.

33d. Copenhagen. Woman running (same type). Above, stopt meander 3's, groups facing alternately r. and l., with one saltire-square and one chequer-square, both from the top; below, key.

33e. Syracuse. Nike. Flying l., head to r., bent, hands as if holding tainia, Doric peplos with apptygma; on l. a low altar. Above, stopt meander 2's saltire-squares from top and bottom; below, key.



FIG. 18.—NOLAN AMPHORA FORMERLY IN THE PANAFY COLLECTION. (a): after *RI. Cuv.* 3, Pl. 20.

33f. Athens 1640. *Eph. Arch.* 1893, Pl. 3. Youth with helmet and woman binding fillet about stole.

33g. Boston R. 440. Robinson *Cat.* Pl. p. 162. Woman with sinigmatheke and youth with spear at stole.

33h. Boston R. 445. Youth and woman at stole.²¹

33i. Athens 12134. Woman with tray and youth with tainia at stole.

* The youth carries a huge arrow, point downwards, as a staff; for such arrow-sticks compare the Schwerin-Pistorchios kotyle

(Jahrbuch 27, Pl. 8), and the Glaukon dinachos in the Thorvaldsen Museum at Copenhagen (Klein, *Leit.* p. 155, No. 5).

VII. **Squat lekythos** (*shape* *Purton, Cat. Pl. 6, No. 240*).

34. Deepdene. Woman and warrior. 1. Woman standing r., Doric peplos overgirt, r. arm extended from elbow with phiale, l. down at side with oinochoe, behind her seat with cushion: 2. Warrior standing with r. leg frontal, head l., on l. arm shield, in l. hand spear, r. arm bent at elbow, short ornamented chiton, Thracian helmet. The mouth of the vase lost; handle convex. Above the picture, egg-pattern; below it, stoep meander in 2's with saltire-squares from bottom. This beautiful little vase, which is to be



FIG. 19.—NOLAN AMPHORA IN DUMESNIL, 309 (d).

compared with our nos 5, 21 and 35, will be published by Tillyard in his catalogue of the collection at Deepdene.

VIII. **Stamnos**.

35. B.M. E 448. Pls. 15-16, and Fig. 24. A. Departure of warrior. B. Departure of young warrior.

Detached lip: on the mouth, elaborate egg-and-dot; neck short: foot simple disc, side reserved, on cushion: handles round, recurving: patterns and palmettes, see Fig. 24.

IX. **Calyx-kraters.**

36. Boston inv. 03.817. Figs. 23 and 50. *A*, Zeus pursuing woman. *B*, Man with stick.

Small. Above, laurel. Below *A*, 3 2's Dourian cross-squares; below *B*, stopt key.

36 bis. Petrograd 767 (1535 St.). Part of *B*, Fig. 5k. *A*, Poseidon and Anymone. *B*, woman running to man.

Small. Above, a leaf-pattern; below *A*, stopt meander in 2's with Dourian cross-squares from the bottom only; below *B*, key.



FIG. 23.—LETTERED IN STRAUER; *Mon. Linc.* 17, Pl. 8.

Three other small calyx-kraters stand extremely close to the Achilles master.

36a. Bologna 295. Pellegrini, *Cat. V. delle Necrop. Etrusche*, p. 140.

Two rows;²⁵ upper row: *A*, Circe; *B*, Man with sword pursuing woman; lower row: *A*, Woman running between youths; *B*, Women and youths.

²⁵ A list of calyx-kraters with two rows is given by Hartwig, *Leam. Mit.* 12, p. 192.

Above pictures, alternating palmettes: between, reserved line: below, stopped meander.

Above 36*b*, laurel; 36*c*, laurel with balls: below *B* in both, key; below *A*, 36*b*, & 2's with saltire-squares, 36*c*, same 3's.

36*b*. Athens 1717. *A*. Athena and Nike. *B*. Man and woman.

36*c*. B.M. E 463. d'Hancarville 1, Pl. 33-35. *A*. Eos and Kephalos. *B*. Woman.



FIG. 21.—LACRIMAE IN QUAESTIO, 324.

The key-pattern is only found once on severe calyx-kraters, namely, on the Corneto krater by Kleophrades (Hartwig, *Monist*, pp. 416-417); but it also occurs on the reverse in seven small calyx-kraters of free style.²² The δ principle is rare on calyx-kraters.²³

²² The key-pattern is confined to the reverse of the calyx-krater: I had overlooked these reverses when I wrote in *J.H.S.* 49, p. 47 that with the exception of the Corneto vase the key-pattern was not found on calyx-kraters.

²³ It is found on the following calyx-kraters: Syracuse (A. Silen and Dionysos: *R. Maass*), by the Berlin master (to be added to my list), Oxford 291 (school of the Berlin master), Gigenti, Mus. Civico, 10; Louvre, C 493.

Bell-kraters.

No bell-kraters can be certainly assigned to the Achilles master; I think it quite conceivable that the following vase is an early piece from his hand, but I prefer to regard it as an imitation. It is a queer bit of work: one of the heads has been twice reproduced because of its portrait-like realism; the other head on the same side is lost, and I shall not be surprised if it turns out to have been kept by the finder because it resembled his father. All four figures have the stiff restlessness of marionettes. The Louvre oinochoe G 438, our No. 36f, is, I think, by the same hand.

36d. New York, Detail, FRIL 2, p. 264, Fig. 44 a = Buschor, *Gr. Vasenmalerei*, p. 185.²² A. Warrior and man. B. Nike and youth.

Mouth convex, below it a convex course with egg pattern. Foot a simple disc, the side of it reserved: no cushion. On each side of each handle, two black conical projections. Below A, 8 2's saltire-squares and one Dourian cross-square; below B same but only saltire-squares.

A small bell-krater in Bologna (323 Zannoni, *Certosa di Bologna*, pl. 43) has the same shape except that the conical projections are absent, and is not far removed in style.

Oinochoai.

No oinochoe can be assigned to the Achilles master; but a pair of oinochoai are very closely akin to his work.

36e. B.M. E.523. Nike and goddess.

36f. Louvre G 438. Eos and Tithonus.

Detached neck, trilobate mouth, high ridged handle, broad base. Above picture, egg; below, clump pattern. At the base of the handle, enclosed of palmette, pointing downwards. The two are by the same hand, and especially resemble the Athens calyx-krater, our No. 36g.



FIG. 22.—LEKYTHOS IN DR. F. O. GUTHRIE'S POSSESSION AT OXFORD.

²² Not from a lekythos, as stated in FRIL *ibid.*

and the New York bell-krater, our No. 36*d*. The pair stand by themselves, we have no other oinochoai with the same shape and patterns.

A word may here be said about the vases classed as school-pieces. They may be divided into three groups: a first group of vases very close to the master's ordinary style, lekythos 33*a*, Nolan amphora 20*a*, 20*b*, calyx-

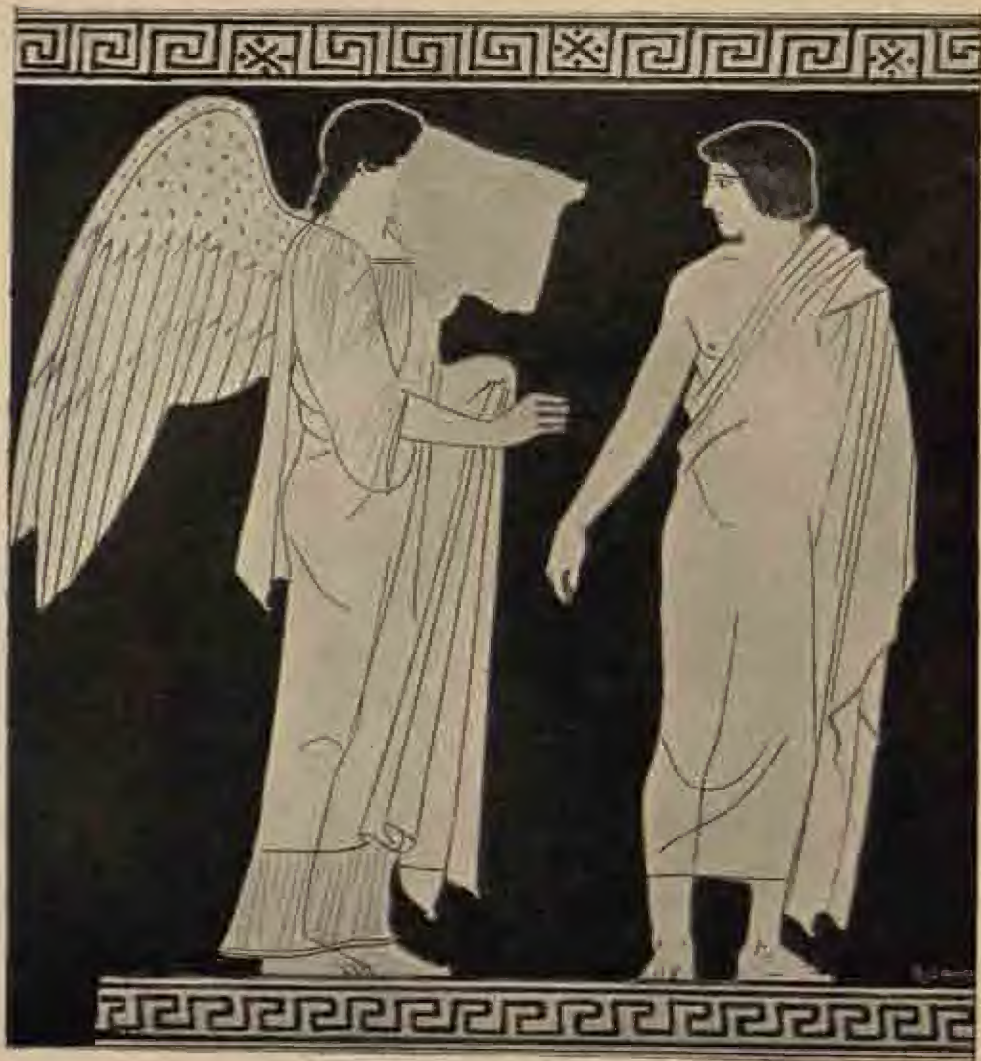


FIG. 23.—LEKYTHOS IN SYNAOUE.

krater 36*a*: a second group of vases still very close, but with a character of their own, Nolan amphorae 7*a*, 7*a bis*, 7*b*, 7*c*, 7*d*, calyx-kraters 36*b*, 36*c*, bell-krater 36*d*, oinochoai 36*e*, 36*f*, lekythos 33*b*.²⁸ Near these, lekythos

²⁸ I am inclined to place here the neck amphora with twisted handles *Mon.* 3, Pl. 23; but I have not seen the original, which was once in the Rhodian collection.

33c, 33d, and perhaps 33e. A third group of later, more florid, less pleasing style; *lekythoi*, all with grave-scenes, 33f, 33g, 33h, 33i.

Drawing.

It must be premised, that on the three largest vases (1, 2, 3), most of the inner marking of the body is not in brown, but in thin black relief-lines. The use of relief-lines for inner markings is more extensive in the free style than in the developed severe style; and even in his ordinary figures our master uses relief-lines for the parts about the knee, where the severe painters prefer brown lines as a rule.



FIG. 24.—STEMMŌS IN THE BRITISH MUSEUM (E 446).

The Achilles master seldom uses any relief-line to emphasize the contours of his figures. This is well seen in his faces: the contour of the face lacks relief. The following exceptions are found on the three largest vases. On 1, the horizontal lines of Achilles' mouth are relief-lines; in relief also the lower side of his chin, to mark it clearly off from the spear which passes behind his head. Similarly on 2, the mouth, lips, and chin of Euphorbos, and only these parts of his face, are in relief, to mark them off from the brown hair of the baby Oidipous who nestles against his shoulder. The three-quarter face of Oidipous is also outlined with relief, for it is what may be called a 'contained' face, that is, it is not outlined against the black

background but against a reserved space. On 3, one whole face, the fluting maenad's, is outlined with relief: the faces of the two friends moving arm in arm are also in relief, but they are 'contained' faces. In the fluting maenad, the artist used a relief-line to mark the flute off from the lips and then, having the brush in his hand, extended the relief to the whole face. Finally,



FIG. 25.—CALYX-KRATER IN BOSTON, INV. 63, 817 (A).

the maenad with the tambourine has a relief-line for the outline of her forehead, the rest of her face being without relief. This same relief-line for the forehead occurs on one other figure in our master's work, namely, the woman on 24. These are the only exceptions to the rule that our master does not use relief-line for the contour of the face.

When the mouth has relief, a little black line is added for the fossette at the corner of the mouth (Achilles on 1, Euphorbos and Oidipous on 2, the two friends on 3).

The nostril is usually but not always marked, and always in black. Let us look at 35 (Pls. 15-16). In the two men on *A* and the youth on *B* we see the more elaborate two-line form, and the same, but with the upright line diminished, in the woman on *A* (the remaining two faces are damaged about the nostril). The upright line is often omitted altogether; for example, in the left-hand woman on the lekythos 23 (Pl. 14. 1), while the right-hand woman on the same vase has the two-line form. These two forms are the usual forms; but in four faces the lower line is omitted instead of the upright line: in the woman on 24, in the woman on 14, in one of the women on 29, and in the elder youth on 11.²⁷ In the large head of Achilles on 1, a third line is added below the lower line: this line is rarely found on vases, but it recurs on the three-quarter face of Oidipous on 2.²⁸

The type of face may be seen at its best on the larger vases, in the face of Euphorbos on 2 or the face of the profile friend on 3: The head is comparatively broad from back to front, the proportions fine, the chin not unduly small, the lips prominent, the nose blunt but powerful,²⁹ the forehead sloping and almost in a line with the nose. There are no nobler heads in vase-painting than the best of our artist's, and in his minor works, such as the lekythos 23 (Pl. 14. 1) we find the same mild and beautiful type. Rarely does it degenerate, as it does in the hasty drawing on 14, into a mere caricature.

There are two three-quarter faces in our master's work: Oidipous on 2, and one of the friends on 3. The two are closely alike, for we notice the same ample nostril, the same fossettes at the corners of the mouth and the same black line from the middle of the mouth to the nose. On 3 we find a less common foreshortening, the three-quarter face seen from the back.³⁰

²⁷ The youth on 24 has the two-line form, the youth on 14 has the lower line only, and 11 has all three forms. The nostril of the second woman on 29 is destroyed.

²⁸ This third line is common in the work of Kleophrades (e.g. *J.H.S.* 30, Pl. 5, No. 1).

²⁹ The nose is occasionally somewhat equiline, as in Achilles on 1, the flute-player on 3, or the Nike on 21; compare the practice of the Berlin master (*J.H.S.* 31, p. 288, *loc.*).

³⁰ In the developed severe style there are a few heads seen directly from behind; some of these are cut away in behind (e.g. *J.H.S.* 30, p. 64, note 88); the following are rare: cup from school of Brygos B.M. E 71 (*J.E.* 1870, Pl. 39, where the head in question is wrongly restored); cups in the style of Oorimos, Mannheim (Hulmann, *Faces in Monochrome*,

pl. 2) and Vienna University; later, about 450, the same head is found on the new Nekyia krater in New York (mentioned *Bull. Metr. Mus.*). On the Vienna cup, a first step is taken towards the three-quarter view from behind, for both ears are turned in the same direction. A contemporary 15. fragment in Würzburg (*J.H.S.* 27, pl. 3) already shows the same three-quarter position as on our vase: it appears again, some twenty years later, on the fragment of a large bell-krater with the Calydonian bear hunt (B.M. E 309). The late fine style sometimes inserts the eye; so on the Gigantomachy vase in Naples (FRH. 2, p. 196), Athens (*Ep. Arch.* 1885, Pl. 7), and the Louvre (FRH. Pl. 96), on the bear hunt volute krater in Naples (phot. Sommer 11053), and on a South Italian bell-krater in Lecce (188).

The eye is usually composed of two lines, nearly but not quite straight (e.g. 23, Pl. 14. 1), with a thin brown mark between them for the coloured part of the eye: but the upper line of the upper lid is sometimes drawn as well. So on the stamnos 35 (Pls. 15-16), three figures have the upper lid drawn, two have not. The upper-lid-line, which lies close to the lower, is marked on the large vases 1 (both figures), 2 (Euphorbos only), and 3 (all the figures), on the B.M. stamnos 35 (twice) and once on the lekythos 24. In the eyes of Achilles and Euphorbos (1 and 2), the upper lashes are indicated, in 2 by a single curved black line, in 1 by three such. In 1 the lower lashes also are indicated, by a row of short brown lines: on 27, the upper lashes are indicated by a separate black line, although the upper lid is not marked.

The coloured part of the eye is rendered by a long brown mark: but Achilles and Euphorbos have a more elaborate rendering; the iris is a light brown space, bounded by a straight relief-line on the side near the nose, and by a curved one on the other; within this, the pupil shows as a short black perpendicular line.

The normal type of ear may be defined as the following (Fig. 26a), where the lowest of the three lines is moveable. For example, out of the ears on

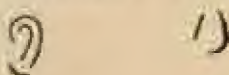


FIG. 26.—TYPES OF EAR AND ANGLE.

the stamnos 35 (Pls. 15-16) two have just this form, while in the third, the ear of the young warrior, the lowest line has moved forward and upwards. Sometimes a fourth line is added, a short line within the two upper ones: once each on 24, 25, and 17. The ear is sometimes simplified by the omission of one or other of these lines, or by the curtailment of the two upper lines in women whose hair is long about the ears (e.g. 21, 23, 25).

Let us now look at the ears on the three largest vases. No ears are indicated on 3, because the Maenads either have long hair covering the ears, or have lost their ears through breakage or repaint. In 2, the man's ear on *B* is of the normal type, like the ear of the young warrior on the stamnos 35: the three-quarter ear of Oidipous has two additional lines, one the short inner line already mentioned, the other a curved line springing from the lower end of the inner upper line: the ear of Euphorbos is hidden by his long hair. On 1, Briseis has the normal ear like Fig. 26, with the added short line, here semicircular: Achilles has a similar, but more complicated ear, with two additional lines.

Males sometimes wear the hair in a *vazziera*, and sometimes they have long hair with ringlets: but the most usual coiffure is that seen in the man on *B* in the stamnos 35 (Pl. 16), where we must notice the two bulges at the back of the head behind the ear. This may be an abbreviation or may represent a variety of the coiffure worn by Achilles on 1, whose hair is plaited into ropes which pass round the head and are tied together under the

front hair, the coiffure of the Omphalos Apollo. In a few figures, the hair seems to be cut close to the head.

The usual coiffure for women is a very simple one, that worn by Eos on 13 (Fig. 16): 10, 13, 14, 16, 17, 18, 19, 23, 24, 25, 27, 34, 35, 36: strings are sometimes shown in red (10, 23, 27, 35, 36). On 22, the woman tying her girdle has broader strings, rendered by reserved lines, which also pass round the base of the ball at the back of the head, making the coiffure which is familiar from the work of the Villa Giulia master (*Rom. Mitt.* 27, p. 293). Instead of strings, a broad band of cloth passes right round the head on 6 and in the taller of the two friends on 3. On 21 (Fig. 9) Nike substitutes for this band a metal stephane with leaves which stops before it reaches the ball; the hair in front of the ear is then tucked back behind the stephane: the same coiffure is worn by the woman on B of 35.

This stephane can also be worn with long back-hair (5, 26). The ends of this long hair are collected into a little bag on 28. Artemis on 22 has long back-hair with a straw garland. The maenads on 3 usually wear long hair or *zazzierò* with ivy-wreaths; one of them has her long hair tied near the neck: another wears a *saccos*, and the woman on 1 also has a *saccos*. A *saccos* of different form is worn with a leaved stephane, on 8 and 23.

In frontal standing figures, the stiff leg is usually frontal and the free leg in profile or nearly so: but some figures have both legs frontal (4, 20, 27), one of the legs being bent a little at the knee to characterize it as free leg. The frontal knee has the form seen on Fig. 8, where the uppermost line denotes the swelling of the vastus internus (1, 5, 10, 21); in 34 the same rendering, but the uppermost line brown; in 4 the upper parts hidden by the *chlamys*. When the knee is not quite frontal, the rendering is modified (13, 14, 19: 1 and 10); 2 (the Silen, cf. the frontal knee with extended foot on 7).

In the frontal leg, the central ridge of the shin bone is not indicated; but a brown line marks the inner side of the tibia (5, 10, 13, 14, 19, 21, 34); on 1 this line is black like the rest of the inner marking. Observe on 21 (Fig. 9) the inner brown arcs marking the patella, and compare the similar lines on 13, 14 and 19. Notice on the same vase 21 the two brown lines springing from the knee and joining, or almost joining, some way up the thigh: they represent the boundaries of the quadriceps tendon, and are rendered in the same way on 5, 7, 10, and 35. Finally, on the same *lekkythos* 21, look at the long curved line running up the inner side of the frontal thigh: it is repeated on 5, 14, and 35.

The profile leg seen from the inside.

The parts about the knee are marked with three black lines (see Fig. 17), the lowest of which may be bent or broken in the middle; 5, 8, 9, 10, 12, 13, 14, 15, 16, 21, 25, 27, 28, 31, 34, 36 *his*. The same lines, but more delicately curved are found on 2. On 17 the lowest line, on 36 the uppermost line, the line of the vastus internus, is brown; in 2, the rendering is like that on 36, but the middle line is also left brown.

For the marking of the lower leg, let us turn to 27 (Fig. 2): a long

brown line starts from the knee and flows down to the back of the ankle: this line is found on 4, 5, 8, 9, 10, 12, 13, 14, 17, 21, 24, 25, 27, 28, 31, 33, 34, 36, 36 *bis*; on 13 the line is broken in the middle; it is black on 2 and 3.

On 33 we find a second brown line, starting below the knee, and running down parallel to the shin; this seems to be the second line which appears on the reverse of 2, with its upper part hidden by the himation.

Let us now notice on 21 (Fig. 9), the short curving line starting near the upper end of the calf-line, and running outwards to the middle of the calf: it is found again on 14, 17, and 25, and in black on 2.

Finally, 21 has an inner arc on the calf: such an arc is also drawn on 35, but in black because the leg is greaved. Still keeping our eyes fixed on 21 (Fig. 9), let us notice the brown curved line running close to the outer edge of the thigh: it is repeated on 5, 9, 10, 13, 28, 34, 36. A second brown line runs up the middle of the thigh, starting from the inner end of the vastus line: 3, 5, 8, 9, 10, 13, 14, 21, 31, 36: on 2, this line is black.

Let us now pass to the profile leg seen from the outside. The knee is indicated by two black lines, like the two lower lines of the profile knee seen from the inside: 9, 15, 16, 17, 24, 25, 27, 31, 36, 36 *bis*. 8 has the same knee, but the lower line brown. In 2, the lines are more delicately curved than usual, and the upper edge of the patella is indicated by a brown line. The walking youth on 33 has an additional black curving line above the ordinary lines. On the reverse of 4, the only reverse where bare legs are shown, the two lines are reduced to a single curving brown line.

The furrow made by the tendon of the biceps is marked by a short black line on 2, 8, 9, 15, 16, 24, 25, 27, 31: by a longer bent line in the bent leg of the rider on 32. There is a second short black line pointing towards the foot, at the lower end of this line, on 2 and 31; on 8, 31, and 36 *bis*, a short horizontal black line pointing towards the back of the knee.

The line of the biceps furrow is continued downwards by a brown line, often quite short: between this line and the shin is a second brown line, starting nearly half way down the leg and running parallel to the outline of the shin (9, 24, 25, 27, 33). Only the first of these two lines is drawn in the rider on 32.

There is only one inner line on the thigh: a brown line marks the furrow at the ilio-tibial band: 8, 9, 17, 25, 27, 36. This line is black, like most of the inner markings, on 2.

The frontal foot, flat on the ground. The foot of the youth on 5 (Fig. 8) is a good example of the type: notice the shape of the great toe and the other toes, and the black arcs marking the ankles. The same toes and the same ankles are found on 4, 9, 10, 19, 21, 30, 34, 35. Of these, 21 and 35 have the great toe-nail marked by a black arc, and 5, 9, and 10 have two forked brown lines between the ankle-lines; the frontal foot of Achilles on 1, in which the outer toes are raised a little from the ground, has two black lines corresponding to these brown lines; further, the great toe-nail is rendered by two curved black lines instead of only one; and the other toes are more carefully drawn, the side-lines being not separated

but joined with a curve at the top, and each toe-nail marked by two black lines: the toes are also arched in the frontal foot on 22. The woman on 27 has the ordinary foot but the ankles are not marked: only one ankle is marked on 1 and 22. The right foot of the fourth maenad on 3 is slightly three-quartered, and the toes are rendered as on the more careful profile foot, while the great toe-nail is the same as on 1.

The only extended frontal foot is on 7. The ankles are the same as in the flat profile foot. The first maenad on 3 has a fine back-view foot.

The profile foot seen from the inside. The ankle has the form Fig. 266. The shorter line is sometimes omitted, especially on minor figures. The Achilles tendon is thrice marked, by a black straight line behind the ankle-lines, once each on 3, 8, and 35: such lines are very rare on vases.

The upper edge of the great toe is indicated by the bent black line seen on 21: on rough figures, this line is sometimes left out. The black line near the sole, marking the 'waist' of the foot (see again 21) rarely fails. We notice on 21 a short black line on the lower side of the great toe; it recurs on 1, 3, and 33. The left foot of Achilles on 1 is slightly inverted, the left foot of the warrior on 4 of 35 rather more so, and still more the right foot of the woman on 32: all three feet have the black 'waist'-line; and on 1 and 22 the great toe-nail is marked by two black lines. Two forked brown lines, denoting the tendons of the foot, may be seen on the foot of the warrior on 4 of 35, starting from the shorter ankle-line and proceeding towards the instep. These lines are rare on vases, but recur on 10, and in black on 1. One of these lines is found on 21 and 34.

The profile foot seen from the outside. The ankle is the same as on the interior profile feet, but the omission of the smaller line is commoner here than there. The toes are usually a row of simple arcs (*e.g.* Fig. 13), but on careful vases the arcs are sometimes double (22, 35); on 1 and 2 the lower arc is carried further round, and so in the little toes only on 21, 26, and 35. Both main forms of toe can be seen on 35 (Pl. I 15-16).

The extended frontal arm, seen from the inside. Let us take as our example the right arm of the warrior on 4 of 35, and notice, first the general shape, and then the two black converging lines on the inside of the elbow; the brown line on the upper arm marking the furrow beside the biceps; the two brown lines on the forearm; the two short black lines marking the tendons at the wrist; and the transverse black line separating hand from arm. First the two black converging lines: the same are found on 9, 13 and once on 3. On 21 we see the same lines, with two additional transverse black lines to denote the crease at the inside of the elbow: the Silen on 3 has the same converging lines, with one crease-line. 5 has crease-line and only one of the converging lines. On 34, both crease-line and converging lines are in brown. 4 and 7 have only one of these lines, the outer of the converging lines; and 14 has no such lines. The biceps line is found on 3, 5, 7, 9, 13, 14, 21, 34, 35: the same forearm lines on

3, 5, 7, 9, and 21. The tendon lines are black on 3 and 1 of 35; brown on *B* of 35 and on 2, 9, 10, 13, 14, 18 *bis*, 21, 34. 21 (Fig. 9) has, in addition to the other lines, a brown line near the point of the elbow; the same is found on 7 and 34.

The foreshortened female arm on 22 has two black crease-lines and no other lines.

The black line between hand and arm is commonly present when the inside of the hand is shown.

The arm in profile, seen from inside. There is usually a black straight line at the inside of the elbow: 3, 4, 5, 7, 8, 11, 13, 14, 30. 6 and 9 have two converging black lines; and the man on *B* of 2 has a brown curved line instead. These lines correspond to the converging lines on the inside of the elbow on frontal arms, and a similar pair is seen on the right arm of Achilles on 1, which shows part of the inner surface.

The arm in profile, seen from the outside. When the arm falls nearly straight beside the body, we have a black line at the inside of the elbow: 2, 24. For the short brown lines near the point of the elbow on 8, compare 11, 18 *bis*, 24, 25, 32, and (in black) 2. The long line on the forearm of the man on 1 of 35 is also drawn on 25. Of the three lines on the same man's upper arm, the two upper ones are found on 24, the two lower, in black, on 2. Three transverse black lines are drawn near the point of the elbow on 33, where the arm is stretched almost straight out; a single transverse black line on 9, where the extended arm is quite stiff. For the two lines near the wrist on 35, compare 24 and 25.

A word must suffice for the hands, which present great similarities, but are difficult to describe. Let us first take the right hand of the warrior on 21 (Fig. 9) and compare with a hand on 5, 9, 34, 35, 36; without the black line at the ball of the thumb, 4 and 10.

With the extended frontal hand on 35, compare the hand in the same position on 17; with an additional line at the base of the fingers, 3 and 36 *bis*; without the short line on the left, 36. This short line is found again on some closed frontal hands on the larger vases, 3, 21, 35.

The hand seen from the back, raised: cf. 26 and 30; with the thumb showing between two of the fingers, 8 and 36. The hands holding phialai should also be compared with each other. Indication of finger-nails in figures on 1 and 35.

The iliac furrow is marked by a black line with a single curve, or with only a slight depression in the middle: a second black line with a single curve springs upwards from the end near the belly (8, 9, 15, 16, 17, 36).

The frontal collarbones are seen at their full length on two vases only, 3 and 9: they are indicated by two curving black lines which do not meet. The longitudinal furrow over the frontal breast-bone is marked by a pair of black lines on 3 and 9: on 9 these two lines reach only half-way up the chest, and above them is a brown horizontal line.

When the figure is in profile or almost in profile, the collar-bone is a black line, straight or slightly curved, which does not meet the breast-bone.

line. The line of the breast bone is then single. The chest is bounded below by a curved black line (8, 27, 9, 11, 16, 17, 28, 36 *bis*). Mantle figures often omit the collar-bone line. The nipple is a black arc or circle (3, 8, 9, 17, 36 *bis*) or a brown (11, 16, 18 *bis*).

The median line from chest to navel is rendered by a pair of black lines on 3, and by a single black line on the Odipous of 2, and on 17; but not on



FIG. 27.—FROM LEAYTOS IN OXFORD, 545.

9 or 16. On 36 *bis* the median line, and the markings near it, are all in black.

The lower end of the thorax is marked by a black line on 8 and 9, and on the frontal torsos in 2 and 3, where most of the inner marking is black; but elsewhere this black line is omitted.

Clothes. The young warrior on 35 (Pl. 16) wears a short chiton of thick stuff, bounded at its lower edge by two long black lines with a single curve. Above that is a band of brown embattled ornament, and then a row of brown dots. There are five such chitons on our master's vases (7, 14, 25, 34, 35). Four of these are edged below by the same pair of black lines: three such lines are found on 14. The embattled pattern is common to 7, 14, 25, and 35: two chitons have a *dancetty* pattern (7, 34); and the brown rectangles seen on 14 recur on 34, although I do not remember to have seen them on a vase by any other master. Where the upper edge of the chiton (25, 34), and its sleeves or shoulder-openings are visible (14, 25, 34), they are bounded, like the lower edge, by a pair of simple black lines. A few brown fold-lines are drawn, below the belt, on 25 and 34.

The short chiton (thin). The only thin short chiton edged below by a pair of simple black lines is on 5: the short chitons on 4 and 13 have three such lines. In these three chitons, the folds are indicated by brown lines: brown lines are also used for the folds on 12 and 24, and in these two vases the chiton is edged below by an irregular brown line. All other short chitons have black fold-lines and an irregular black lower edge: the type of the folds may be seen on 35 (Pl. 15-16); groups of long lines which reach the lower edge are separated by shorter lines which do not. The chiton is bounded above by two simple curving lines.

The thin long chiton usually has an irregular lower edge with black fold-lines. The pair of simple-curving black lines is sometimes found on standing figures: with brown fold-lines on 7, 19, 23, 29, 30; with black fold-lines on 8, 10, 24. Where the fold-lines on the chiton are brown, the long sleeve is bounded by two simple black lines (7, 19, 23, 29, 30); when the fold-lines are black, these bounding lines often cannot be distinguished from the other lines on the sleeve.

The long chiton is bounded at the neck, like the short chiton, by two black simple-curved lines: 3, 5 *bis*, 6, 7, 10, 16, 17, 18, 19, 23, 24, 25, 26, 27, 29, 30, 35, 36. The woman on 28, and one of the women on 3, have three such lines.

There are altogether eleven Doric peploi: four with a simple apodygma (1, 21, 22, 35), and seven with the apodygma overgirt (3, 5, 22, 34, 35).

I have already mentioned the himation figure which appears with great regularity on the reverses of our master's vases. Fifteen of these are collected on pp. 184-5: there are nineteen altogether, the other four are on 6, 9, 10, and 16. Four of these figures wear a chiton as well, the rest are content with a single garment. The figure is usually a bearded man, five times a youth and once a woman: they all hold sticks, and hold them in the same way, except the youth on 9, who holds a *sigill*, the woman on 19, who holds a *tainia*, and the youth on 18 *bis*. All the Nolan amphorae have this figure, the calyx-kraters have it and one of the two pelikai: the large figure on the neck-amphora 2 differs from the rest in one or two details. It is not necessary for me to describe these figures; the pictures speak for themselves.

This same drawing of the himation is not confined to the reverses

of vases, but appears on obverses as well. The standing woman on 23 (Pl. 14, 1) has the same himation, and the right-hand woman on 29 (Fig. 3); the woman on 24 (Pl. 13) the same with a slight variation; for we see the opening of the himation with its triangular folds: close to this himation is the himation of the large reverse figure on 2 (Fig. 6). These folds lead us to the right-hand figure on the front of 11 (Fig. 15); the



FIG. 23.—NOLAN AMPHORA IN PETROSELIN (A).

himation here covers both shoulders, which changes the drawing of its upper part; and the nearer leg is advanced instead of the further, which modifies its lower part: the outline of buttocks and thigh is now marked by long black lines. These same black lines are found in the himation figure on *B* of 35 (Pl. 16); but in the figure on 35, since the himation covers one shoulder only, the upper part of the himation is drawn in the same way as

on the reverse figures, except that the zigzag lines of the overfall are black instead of brown. The other himation figure on this vase faces right, so that the nearer arm is exposed instead of the further one: this figure is to be compared with the left-hand figure on 11 (Fig. 15).

As to the drawing of the himation in frontal figures, let us compare 16 with 36, and again with the profile himatia on 13 and 14. On 27, the edge of the overfall and the lower edge of the himation are black instead of brown: but we have found that already on 2, 11, 35.

A favourite motive is the hand grasping the himation or chlamys which covers it: 2, 6, 13 (twice), 14, 15, 25, 30, 36 *bis*.

Out of the six helmets on these vases, four are Corinthian (5 *bis*, 7, 8, 35), and three Thracian²² (21, 34, 35). The corslets on 1, 21, 35 are of one type: the half-seen corslets on 7 and 35 seem of simpler make.

Wings are always drawn as on 21 (Fig. 9): that is, the upper part sown with brown semi-circles, the quills parallel black lines crossed by two rows of brown arcs: 6, 10, 13, 14, 21, 26, 30.

The favourite patterns of the Achilles master are δ 3's or 2's with usually saltire-squares, sometimes other kinds of cross-squares: and in subordinate positions—below the picture on lekythoi, or on the backs of other vases—the key. There are seven instances of stopt meander, without the δ principle, in 2's and 3's with pattern-squares. He uses the stopt key twice, the 'clump'-pattern and the hook-pattern once each.

The ordinary work of our master was decorating lekythoi and the small neck-amphorae we call Nolan. From time to time he turned his hand to other vase-shapes: two small pelikai remain and two small calyx-kraters, all decorated with the same kind of pictures the painter was accustomed to put on his lekythoi and Nolan amphorae: Oidipous and the Sphinx; the departure of a warrior; a god pursuing a woman. These vases, lekythos, Nolan amphora, small pelike, small calyx-krater are roughly of the same size: but sometimes the painter takes a little pot, of the 'squat lekythos' shape, and puts two of his customary figures on it, a warrior and a woman pouring wine for him, small, but lovingly drawn; or a larger vase, the stamnos. On both sides of the stamnos he draws 'the departure of a warrior, but to fill out the picture he adds an extra figure on each side. Or he chooses the rare and still larger vase the 'pointed amphora,' and covers it with a whole frieze of figures; or a large amphora, on the front of which he draws only a single figure, but very carefully and delicately; he does not sign his masterpieces with his name, but he names the figures instead, which he never does in his ordinary work: Achilles: Euphorbos and the baby Oidipodas.

The master's usual practice is to put two figures, and only two, on the front of the vase: and one on the back, when the vase admits of drawing on the back. All the lekythoi have two-figure scenes; although the second figure is not always human, twice a horse and once an immense swan.

²² R. Seiderow, *Jahrbuch* 27, pp. 317 ff.

The Nolan amphorae have two figures on the front, with two exceptions, where a single running figure serves to fill the space; and one figure on the back. The two large amphorae have a single figure on each side; the stamnos three figures, the pointed amphorae as many as eleven; the other vases two, or two on the front and one on the back: only once two on each side.

The two figures may be at rest or in motion. They are more often at rest; and then, more commonly than not, one of the figures is frontal and the other in profile, though the heads of both figures are turned towards the middle of the vase. When the figures are in rapid movement, the motive is a pursuit, either of a woman by man or youth or of a youth by a woman. Again, both heads, as usual in vase-painting, face towards the middle of the vase.

Of the restful scenes, the commonest is a greeting scene, the departure or return of a warrior or a youth. On three vases, two women are together, on two, two youths: there are three sphinx scenes and two grave scenes, and once only, an athlete with his trainer; no komos, and no fighting.

More than once the reader of these pages must have asked himself, Is it possible that this painter painted *white-ground* lekythoi as well? (or perhaps rather, Is it possible that the writer will venture to attribute white lekythoi to his master?) I believe he did, and that he was moreover a leading white-lekythos painter in his day.

A list of forty-three white lekythoi follows: nineteen of these have already been put together by Bosanquet in one of his excellent papers on white-ground lekythoi; and other writers since Bosanquet have noted the kinship between this and that lekythos in my list.²² A good number of years separates the earliest members of the series from the latest, and so we shall be prepared for a certain variation from vase to vase; but I believe it will be found that these forty, if not painted by one painter—as I think most, if not all of them are—at any rate form a homogeneous group, distinct from other groups of lekythoi and painted in one style. Further, I believe the painter to be no other than our Achilles master: it must be remembered that the technical difference between red-figured and white-ground vase-painting causes certain differences in drawing, particularly in the treatment of the clothes:²³ but, this allowance made, we shall find the greatest similarity between each of these white lekythoi and the red-figure work of the Achilles master. To take an example, No. 31 in my list, one of the very best lekythoi we possess. Apart from the patterns, let us compare arms, legs, feet, faces, with the renderings on the red-figured vases we have been studying: are they not strikingly similar, even to the very curious curving line near the back of the right knee which we remarked on 14, 17, 21, 25, and 2 (p. 212)? And look at the great eye on the shield: it

²² Bosanquet, *J.H.S.* 19, pp. 160-161. I have omitted Nos. 2 and 7 in Bosanquet's list, the latter because I have not seen the vase, which is much restored. Kleber (*Wissenschaftliche Attische Lekythen*, p. 119 and p. 211),

groups together our numbers 25, 29, 31, and 10; see also Fairbanks, *Athenian White Lekythoi* under each vase.

²³ see Kleber, *ibid.* pp. 54 ff.

is just the eye of Achilles on the Achilles amphora (p. 210). Let this one example suffice for the present: I do not intend to treat these white lekythoi at greater length, because I have not been able to study some of the pieces, particularly the Athens pieces, as carefully as I hope to study them, and Riezler's admirable reproductions were not available until my paper was almost finished.²⁴ The list I submit is a tentative one; but I submit in the belief, as I have said, that the forty vases form a real group, very likely all by one painter, most of them at any rate by one painter; and, further, that this painter is the same as the master of the Achilles amphora.

The outlines are generally drawn in glaze-paint, but in dull paint on four vases (38-40). The shoulder is white, with egg-pattern and carefully drawn palmettes. The usual brown line below the picture is twice replaced by a band of key-pattern (23, 40) and once by a stopt key (31), both patterns familiar on the works of the Achilles master. Above the picture, the commoner patterns are the Achilles master's favourite patterns: δ 3's saltire-squares (8, 24-36, 38, 39, 39 bis) and δ 2's saltire-squares (15-23); 14 has a key-pattern: the others have other kinds of meander in 3's or 2's with saltire-squares (Dourian cross-squares on 1 only), without the δ principle. Four love-names are found on these vases: Hygieiaion (1, 2, 13, 24), Diphilos,²⁵ Alkimedes, son of Aischylides (8), and Axiopaithes, son of Alkimachos. We have already noticed, on a red-figured lekythos belonging to the Achilles master, one of these three-line inscriptions giving the father's name, Kleimias the son of Pedieus.

1. B.M.D 48. F. v. 36; Bosanquet D; *Wh. A. V.* Pl. 2; Klein, *Liebl.* p. 167. Woman giving rolled garment to girl. *HVFIAINON KAAOΞ.*

2. Madrid 296. F. v. 38, 1; Fairbanks, *Ath. Wh. Lekythoi*, Pl. 8, 2; Leroux, *Cat. Pl.* 34, 1. Woman with tainia and woman with smegmatotheke. *HVFIAINON KAAOΞ.*

3. Onés coll. Somzée. *Cat. vente coll. Somzée*, Pl. 5, No. 100. Woman with clothes and girl.

4. Oxford 545. F. v. 56; Bos. N; detail, Fig. 27; *J.H.S.* 25, Pl. 3, 2. Woman with smegmatotheke and boy at tomb.

5. Rouen. Woman with rolled garment and woman with alabastron.

6. New York inv. 08.258. 18. Woman about to shake hands with youth.

7. New York inv. 08.258. 17. Woman tying girdle and woman with alabastron.

²⁴ I mention the following details for comparison with the red-figured vases: legs, 25, 27, 51, 34, 37; arm, 4, 34; ankles, 2; feet, 4; hand extended downwards, 19, 18, 34; hand swept in imitation, 6, 9, 13; himatia, 7, 9, 29.

(The 'frown-line' on the forehead, seen on 4, 31, 34, 40, is also found on the *ophion* in No. 12 of the red-figured list).

²⁵ Many of the other lekythoi with Diphilos bear a strong resemblance to our group.

7 bis. Berlin inv. 3970. F. v. 44. Seated woman with smegmatotheke and woman. ΔΙΦΙΛ(ΟΣ) ΚΑΛΟ(Σ). The upper half of the second figure modern: it is female.

8. Oxford 260. F. v. 33; Bos. 1; Gardner, *Ashmolean Vases*, Pl. 20; Klein, *Liedl.* p. 163. Woman seated with lyre and woman with lyre. ΑΔΚΙΜ(Η)ΔΗC ΚΑΛΟC ΑΙΕΧΥΑΙΔΟ.

9. Vienna, K. K. Museum. F. v. 59; Bos. M; Fairbanks, p. 235, Fig. 50. Woman and man at tomb.

10. Vienna, K. K. Museum. F. v. 43; Bos. E; *Festschrift f. Beaudorf*, p. 89; Fairbanks, p. 221, Fig. 47. Woman giving rolled garment to girl.

11. B.M. D. 53. F. v. 34; Bos. C; *Wh. A. V.* Pl. 4. Seated woman with wreath and woman with string.

12. Athens 12784. Riezler, *Weissgrundige Attische Lekythen*, Pl. 34. Woman with pyxis and woman with tray.

13. Copenhagen. Seated woman with smegmatotheke and woman with tray. ΗΥΓΙΑΙΝΟΝ ΚΑΛΟΞ.

14. New York inv. 06.1171. F. v. 48a; Fairbanks, Pl. 10, 1. Woman with tray and woman with smegmatotheke.

15. Louvre. F. iv. 16. Seated woman with smegmatotheke and alabastron, and woman with tray. Traces of an inscription.

16. Boston 449. F. v. 68; Bos. S; Riezler, p. 21, Fig. 13. Woman with smegmatotheke and woman with tania at tomb.

17. South Kensington Museum. F. v. 71; Bos. R; *Burlington Club Cat.* 1904, Pl. 94, H. 34. Two youths moving towards tomb.

18. Bologna. F. v. 45; Pellegrini, *Cat. coll. Palagi ed univ.*, Pl. 2 and Fig. 56; Fairbanks, p. 223. Woman with lyre, woman, and duck.

19. Athens 12795. Woman with tray and woman.

20. Athens 12791. Riezler, Pl. 39. Woman and woman with rolled garment.

21. Athens 12794. Riezler, Pl. 35. Woman with alabastra and woman with tray.

22. Athens 12790. Woman with tray and woman with smegmatotheke.

23. Bonn. F. v. 40; Bos. F; *Bonner Studien*, Pl. 11 and p. 154 right. Woman with rolled garment and woman tying her girdle.

24. Worcester, U.S.A. F. v. 35; Fairbanks, Pl. 9, 1. Woman with tray and woman with 'toilet-vase.' ΗΥΓΙΑΙΝΟΝ ΚΑΛΟΞ.

25. Athens 1821. F. v. 69; Bos. L; Fairbanks, p. 242; Riezler Pl. 37. Woman with smegmatotheke and youth with spear at tomb.

26. Athens 12746. Woman with mirror and woman with alabastron and cloak.

27. B.M. D 54. F. v. 70; Bos. Q; *Wh. A. V.* Pl. 5. Youth with spear and youth with bag at tomb.

27 *bis*. Petrograd 936. Woman with tray, and woman.

28. Athens 12745. Woman with tainia and youth with spear and shield at tomb.

29. Athens 1823. F. v. 62; Bos. K; Fairbanks, p. 235, Fig. 51; phot. Alinari 24473, 5; Riezler, Pl. 38. Woman with smegmatotheke and woman with alabastron.

30. B.M. D 55. F. v. 67; Bos. H 2; *Wh. A. V.* Pl. 26 B. Woman and youth with spear.

31. Athens 1818. F. v. 49; Bos. I; *Bonner Studien*, Pl. 12; Riezler, Pl. 36. Seated woman and young warrior.

32. Athens 1980. F. v. 55; Fairbanks, p. 232, Fig. 49. Woman with tainia and youth at tomb.

33. Once coll. van Branteghem. Bos. G; *Burlington Club Cat.* 1888, Pl. No. 56. Youth and old man.

34. B.M. D 51. F. v. 46; Bos. H; *J.H.S.* 12, Pl. 14; *Wh. A. V.* Pl. 3. Woman with helmet, warrior, and duck.

35. Boston inv. 13, 201. Girl with box and woman. ΑΞΙΟΡΕΙΘΗΣ ΚΑΛΟΞ ΑΑΚΙΜΑ+Ο.

36. Boston inv. 13, 187. F. v. 32; Bos. B; *Röm. Mitt.* 1887, Pl. 12, 5. Seated woman and woman. ΑΞΙΟΡΕΙ(ΘΗΣ) ΚΑΛΟΞ ΑΑΚΙΜΑ+(Ο).

37. Athens 1822. F. v. 53; Bos. P; Fairbanks, Pl. 15; Riezler, Pl. 40 and p. 114. Naked youth with strigil and woman with tray at stele.³⁰

38. Athens 1965. F. vi. 2, 3. Woman with tainia and warrior at tomb.

39. Athens 1838. F. v. 57; Bos. O; Benndorf, *Gr. und Sic. Vasenb.* Pl. 18, 2; Riezler, Pl. 56. Youth with spear moving towards stele, and woman.

39 *bis*. Petrograd 943. Woman with tray and woman with alabastron.

40. Cabinet des Médailles 504. F. vi. 2, 5; *Gaz. Arch.* 1885, Pl. 31. Woman and man at tomb.

J. D. BEAZLEY.

³⁰ It is with some hesitation that I include this vase in my list.

POSTSCRIPT.

After this article was written, the Ashmolean Museum acquired at the Jekyll sale a small calyx-krater of the same type as Nos. 36, 36 *bis*, and 36*b* in my list. The pictures, which Mr. Hogarth has kindly allowed me to reproduce, are by the Achilles master.



FIG. 29.—CALYX-KRATER IN OXFORD, INV. 1914. 730. (*A*).

36 *ter*. Oxford inv. 1914. 730. Figs. 29-30. *A*. Artemis and Apollo. *B*. Woman. Above, laurel; below *A*, stopped meander in 3's with black saltire-squares touching the bounding lines both above and below; below *B*, key. It will be seen that the woman on *B* belongs to the series figured on pp. 184-5.

A small squat lekythos in Berlin is also by our master.

34 *bis*. Berlin. Head of Selene. Below the picture, a red or white line. A very slight work.

By the kindness of Mr. L. D. Caskey, I am able to publish a photograph of the Boston lekythos No. 28 in my list (Fig. 31). It is worth while comparing the folds on the woman's right thigh with the similar folds in Figs. 11 and 28.

The Kleinias vase Naples 3175, mentioned on p. 195, is published in Costanzo Angelini, *Vasi dipinti del Museo Veneziano*, Pl. 9; but badly. A hitherto unmentioned Kleinias vase is to be found in Adam Buck, *Proposals for publishing by subscription 100 engravings from paintings on Greek*



FIG. 30.—CALYX-KRATER IN OXFORD, INV. 1914. 730. (67)

vases which have never been published, Pl. 3. The only known copy of these *Proposals* is in the library of the Greek and Roman department at the British Museum: it is cited by Reinach in his bibliography (*Répertoire*, 2 p. 369). The vase was very likely a Nolan amphora, and the pictures are in the same style as Nos. 7a-7d in my list.

7a. Once coll. Samuel Rogers. Adam Buck, Pl. 3. A. Woman running with oinochoe and phiale: KAINIAC KAAΩC. B. Woman standing l., r. arm extended.

Two Nolan amphorae with ridged handles by the same imitator of the Achilles master are in the Metropolitan Museum.



FIG. 31.—LEKYTHOS IN BOSTON, INV. NO. 8077.

20a. New York inv. 12. 236. 2. *A*. Eos and Tithonus. *B*. Youth with stick, standing r.

20b. New York inv. 12. 236. 1. *A*. Woman with oinochoe, and Athens with phiale. *B*. Youth with stick, standing r.

Below *A* on each, 5 2's saltire-squares; below *B* on each, key.

Finally, four vases in American museums are to be added to the list of *white lekythoi* given on pp. 220-222.

41. New York inv. 08. 258. 16B. Youth with spear and woman at stele.

42. New York. Seated youth (brown flesh), and woman.

43. Boston inv. 08. 368. Woman with tray, and woman.

44. Boston inv. 1440. 12; lent by Professor Richard Norton. Woman with tray, and woman.

Nos. 41 and 43 like Nos. 23 and 40, have a key-pattern below the pictures; Nos. 42 and 44 the usual brown line only. Above the picture: 41 and 42, 5 2's with saltire-squares; 44, 5 3's with saltire-squares; 43, stop-maeander in 3's with saltire-squares. 44 is of ordinary size, the others are larger.

J. D. B.

LEUKAS-ITHAKA.

It was in 1900 that Dr. Dörpfeld¹ first proclaimed, to the German Institute at Athens, that Leukas and not Thiaki was the Ithaka of Homer. In 1902 he read to the *Archäologische Gesellschaft* of Berlin a paper on the subject, which in 1903 was published in *Mélanges Perrot*. To this paper Wilamowitz gave a scathing and even contemptuous reply in 1903, and Dörpfeld rejoined in his *Leukas*, 1905, which also contains his original essay. Since then the controversy has raged without intermission, but it has been almost confined to Germany. This country has not so far contributed any comprehensive paper on the subject,² and it would not be easy, so many are the matters that the dispute embraces, and so warm and minute has the discussion become, to prepare a statement with less than a considerable volume at one's disposal. I therefore propose to confine myself here to one of the points in the controversy, and I select that which the Leukadists, as they are called for short, regard as supplying the best evidence in their favour, and which is consequently noticed in nearly all papers and treatises on the subject. This includes the incident of the return voyage of Telemachus from Pylos to Ithaka, his escape from the ambush laid for him by the Wooders at the island Homer calls Asteris, and the identification of that island on the modern map.

A sketch map accompanies, on which, to avoid confusion, the localities are described, for reference in this paper, by their modern names. At the end will be found set out the passages of the *Odyssey* on which a decision of the points at issue must be based.

The Leukadists affirm that Asteris is to be found in the island of Arkoundi, believed by some to be the Krokyleia of B 633, which lies, or can be said to lie, between the N. coast of Thiaki and the S. of Leukas. The Ithakists contend that Asteris is the rock Daskalio near the E. coast of Cefalonia, in the strait between that island and Thiaki, and opposite the bay, still preserving the name of Polis, on or near which they place the

¹ Dörpfeld had really anticipated him, in a review of Jebb's *Homer* in *W. M. R.*, 1894, 63 ff.

² See a short Bibliographical Note at the end of this paper.

capital of Ithaka according to the *Odyssey*. Croiset seems to receive no support for his suggestion (*Légende primitive d'Ulysse*, 29) of Atoko, W. of the N. coast of Thiaki, though Goessler (*B. ph. W.* 1912, 355), in condemning it because too large, forgets that the objection applies to his own Arkoudi, which is about the same size as Atoko. Mr. Samuel Butler, who thinks (note, in his *Translation of the Odyssey*, to i. 26) Nausikaa conceived Telemachus' voyage as from Pylos to Trapani, does not appear to deal with the position of Asteris.



The evidence for identification groups itself about certain points, the first of which is, where were the *vḥorai θoai* (or *θoai*) of o 299?

Early in o Athens directs Telemachus to return home. She warns him that the Wooers have laid an ambush at Asteris: therefore he is to sail by night, to keep away from the islands (*ἐκὰς νῆσων*), and to land on the nearest shore (*πρὸς τῇ ἀκτῇ*) of Ithaka. She does not mention the *vḥorai θoai*; the poet does so when describing the ship's run. If we accept Dr. Monro's rearrangement of o 295-300, Telemachus sails at sunset and

heads for Phia, passes 'Krounoi and Chalkis,'² coasts along Elis, and then,—*ἐνθεν δ' αὖ νῆσσιον ἐπιπρόηκε βοῆσιον*, ο 299. Which islands are meant?

Some think, Leukadists and Ithakists alike, that *βοῆσι* is simply to be taken as 'swift,' *νῆσσι* *βοῆσι* being islands that glide swiftly by as a vessel passes them. So, for instance, Merry, Pierron, and Gröschl. Goessler gives *sich bewegend* or *eben hellleuchtend*. Monro and Hayman, on the other hand, refuse to regard the rendering seriously, and surely 'he steered his course for the swiftly gliding islands' is an absurdity.⁴ And of course this interpretation does not help us to identify the islands.

Dr. Monro, in his note on ο 299 f., written in or before 1901, and so *ante litteram notam*, finds it 'on the whole likely' that the islands are the three always associated with the Homeric Ithaka viz. Δουλιχίον τε Σάμη τε καὶ Ὀλύνθος, i.e. in his view, Dulichium (wherever it may be), Cefalonia, and Zante. But he frankly leaves *βοῆσιον* unexplained, and the usual interpretation, 'which has satisfied many scholars' (that the *νῆσσι* *βοῆσι* are the Echinades), practically undiscussed. Nor does he explain which islands Athené means Telemachus to 'keep his ship away from.' If, after leaving the shores of the Peloponnesus, Telemachus makes at once for the big islands to the N.W., there are no islands for him to avoid.

The Leukadists identify the *νῆσσι* *βοῆσι* with the Montagne Rocks, following Bérard (*Les Phéniciens et l'Odyssée*, i. 138 ff.), who describes them from the *Instructions Nautiques*, and with the help of an extract from the chart, as a line of rocks, about a mile in length, covered in these days with water to a depth of about thirteen to thirty feet, and lying a little to the N. of W. of the middle point of the coast between C. Glarenza and C. Trenito.⁵ And Telemachus' fear, expressed ο 300, (he made for the *νῆσσι* *βοῆσι*) *ὀρμαίνων ἢ κεν θάνατον φέρει ἢ κεν ἄλγος*, is that he may stick (*rester pris*) on these rocks. But all this is extremely doubtful.⁶ First, the interpretation of *ἄλγος* is new and against all authority. And see ξ 183 f. Secondly, if these rocks, 'presumably visible in ancient times' (Dörpfeld, *Leukas*, p. v., followed by Goessler), were a danger to mariners, why should Telemachus not rather steer clear of them? Thirdly, Telemachus has been coasting along Elis from the S. The first three words of ο 299, *ἐνθεν δ' αὖ νῆσσιον ἐπιπρόηκε βοῆσιον*, evidently mean that now comes a change; he leaves the coast. But by this time he must be past C. Trenito and some way up to C. Glarenza. That is, he is at or nearly abreast of the Montagne Rocks. What then is the sense of ο 299 f. Why should Telemachus strike away to the W. in the direction of the serocks? For what Michael asks (*Heimat des Odysseus*, 31), do they serve as a *Richtungspunkt*? Dörpfeld says, i.e.,

² Small streams S. of the Alpha (Sikes and Allen on *Hym. Ap.* 425).

³ The interpretation might be justified if *βοῆσι* were a standing epithet common of *νῆσσι*. But common as *νῆσσι* is, the combination does not recur.

⁴ Exact position given by Grün, *Apologos*

ii. *Phaistos*, 50, as 37° 54' N., and 21° E.

⁵ The Rocks are accepted by Mr. Agar, *Homeric*, 266, admitting *βοῆσι* = 'sharp,' 'pointed.' But Telemachus' fear, he insists, is not of shipwreck, as Bérard thinks, but of capture by the Wozers.

they are admirably suited as a point to be made for by a ship from Pylos going outside, i.e. to the W. of, Cefalonia, as he formerly thought was Telemachus' course to Lenkas. But he no longer believes that, and so the making for the rocks is meaningless. Fourthly, if the poet means the Montagne Rocks, he has described the commencement of the voyage and left all the rest out. We must also assume with Dörpfeld that the rocks were in those days above water, i.e. that they have since sunk or that the sea has since risen. These are possibilities which both sides admit. The region is *Erdbebenland*, one in which earthquakes are not uncommon. In Zante 'earthquakes are frequent and at times disastrous' (*Encycl. Brit.* s.v.). But I need not quote authorities on a point which is generally admitted, or regarding the possibility of erosion. Even accepting these rocks as a then visible obstruction to navigation, Telemachus' heading for them is unintelligible.

The Ithakists' view is as old as Strabo. It makes the *νήσοι Θοαί* the Echinades, off the mouth of the Achelous. Telemachus, if he returned the way he had come, would, when leaving the Peloponnesian coast, shape his course for the S.E. end of Cefalonia and sail up its E. coast and along the strait to Polis. But warned by Athené he keeps away from Cefalonia, makes what Paulatos calls a *λοξοδρόμησις*, heads for the Echinades and, as he is nearing them, cuts across to the S. end of Thiaki mentioned by Athené as *πρώτην ἀκτὴν Ἰθάκης*, where he lands in the bay of S. Andrea unobserved by the Wooers, who are cruising in the strait.

The difficulties here are first, that Athené says nothing about the Echinades; but that is not a great matter. Next, the run across from them to Thiaki is not described, but that is a much smaller omission than has, as we have seen, to be assumed in the case of the Montagne Rocks. Thirdly, the Lenkadists contest the identification with the Echinades. In the *Catalogue*, B 625, these are not called *νήσοι Θοαί* but *Ἐχίναι*. That is in the description of the realm of Meges, who rules the men *ἐκ Δουλιχίου Ἐχινίων θ' ἱερών, νήσων αἱ ναίοντι πέτρῃ ἄλλῃ Ἥλιδος ἄντα*. But where is Dulichium? That has always been a crux. It has been found in Dolicha, now Makri, an island off the mouth of the Achelous; in an island, now part of the mainland, E. of Makri; in Meganisi, E. of Lenkas; in Cefalonia; in the W. part of Cefalonia; in Lenkas; it has even been said to be now at the bottom of the sea. Cefalonia and Lenkas are decidedly the favourites, and opinion is about equally divided between them. I hazard the suggestion that Lenkas will prevail eventually.⁶ In that case, if the *Catalogue* means

⁶ But see von Meibner in *N. Jhb. f. d. kl. Alt.* vii. 236.

⁷ For recent statements see Mr. Allen in *J.H.S.* xxx. 304 ff. and Silliman in *E.* p. 117. 1913, 1960 f. The former refers to Bunbury, *Hist. of Ant. Geog.* i. 69 f., and Vollgraf, *N. Jhb. f. d. kl. Alt.* xix. 627 ff. The suggestion had also been made by Prof. Warr

in *C.R.* xii. 304, and apparently, by Kurlak in *H. H. P.A.* 1894, 697 ff. Mr. Thompson, in *Liverpool Annals* iv. 133, seems to approve. Dörpfeld appears to make Dulichium part of the kingdom of Odysseus, which would involve a discrepancy between the two epics. I have seen this view contested, and can find no warrant for it in the *Odyssey*. Ferrabino, *Le*

to give Meges a continuous realm—as Mr. Allen, *l.c.* 306, seems to understand!—the Echinæ must include the islands between Loukas and the Achelous, and the *νήσοι θαλάσσιοι* would be the group of rocky islets, certainly 'pointed' in form, at the extreme S. of the line, and looking towards Elis. This is a possible and satisfactory explanation of the difference in nomenclature. In the *Catalogue* the poet is describing the long line: he is the Geographer for the nonce. In the *Odyssey* he merely mentions the southern end which he requires for his story.

But there is positive ground for this identification. Strabo accepted it, and has been followed by many authorities,* as Munro admits. He wrote (viii. 3. 26), *θαλάσσιαι δὲ εἶρηκε τὰς ὀξείας τῶν Ἐχινάδων ὅτι εἰσὶν αὗται, πλησιάζουσαι τῇ ἀρχῇ τοῦ Κορινθιακοῦ κόλπου καὶ ταῖς ἐμβολαῖς τοῦ Ἀχελϋοῦ*. These islands have most of them become part of the mainland, but the old name survives in one of them, still an island and now called Oxia. But is the equation *θαλάσσιαι* = *ὀξείας* correct? In other words, did *θαλάσσιαι* ever bear the meaning 'pointed'? For a full discussion Lang refers to Oberhammer's *Akarnanien*, and all the Homeric material is collected by Büttmann in a lengthy discussion in his *Lexilogus*, s.v. *θαλάσσιαι*. The chief piece of evidence is *ἔθλωσα*, i. 327, which certainly means 'I pointed,' 'made sharp,' and shows that *θαλάσσιαι* once had the meaning 'pointed.' When it ceased to have that meaning, the islands would cease to be called by it and become *ὀξείαι*. Lang says they can be seen at a great distance, and, again quoting Oberhammer, that they are in these days a guiding point for navigators. And certainly they are 'pointed.' A drawing at p. 102 of Mure's *Journal of a Tour in Greece* leaves no doubt about the appropriateness of the epithet. Hayman compares the 'Needles.'

In addition to the above it seems only necessary to say this, that for all those who are satisfied that the *νήσοι θαλάσσιοι* are not Cefalonia and Thiaki, and not the Montague Rocks, the matter is really settled. What other islands have ever been said to be, or can be, the *νήσοι θαλάσσιοι*? I think judgment on this point must undoubtedly be given against the Leukadists.

The next question is this. In two places in the *Odyssey*, δ 672 and ο 29, Asteris is said to lie *ἐν πορθμῷ* (in δ 843, *μέσσηγρῷ*) *Ἰθάκης τε Σάμου τε πειραλοέσεως*. Does this location better suit Arkoudi, between Thiaki and Loukas (Dörpfeld's Samé and Ithaka), or Asteris between Thiaki and Cefalonia (the Ithaka and Samé of the Ithakists)?

A decision depends on what we understand by *πορθμός*, and the Leukadists, as Goessler in *W. kl. Ph.* 1906, 57ff., affirm that the word is just as applicable to the *Mecrange* between Loukas and Thiaki as to that between Cefalonia and Thiaki. That can hardly be admitted. The former

Interpretationes ad Catalogo Quercus (Abi d. R. Acad. d. Science d. Torino, xlvii.) makes the same assertion.

* For instance, among the old writers on the

Ithaki question, von Lillienstern, *Über die ägaischen Inseln*, 1832, and more recently Gustav Lang, *Untersuchungen zur Geographie der Odyssee*, 1911.

might be described, loosely, as a strait;¹⁰ the latter is an indubitable strait, and strait is the term to use of it. A glance at the map suffices. And indeed the Leukadists have felt the difficulty. I refer to Goessler, *Leukas-Ithaka*, 50, quoting Gallina, and to Csengeri in *W. kl. Ph.* 1909, 318. Gallina says *πορθμός* is synonymical with *πόρος*, 'which does not always mean "ford" or "strait" but also in general "path" or "way" by water or by land,' and Goessler that '*πορθμός*, connected with *πόρος*, μ 259—"path over the sea," means "water-way," not "strait." So that G. Lang, after setting out and illustrating the uses of *πορθμός* and quoting the statements of his opponents, asks in despair, 'what then in all the world is the Greek for "strait"?' Goessler in reply (*W. kl. Ph.* 1906, 93) can only repeat that his *Meerenge* is as good as Lang's. That does not appear to be so, and here again the Ithakists must be allowed to have scored a point.

Next, the Homeric Asteris is μέσση ἀλί. The phrase might seem to suit Arkoudi better, as Daskalio is much nearer to Cefalonia than to Thīaki, while Arkoudi is more in the open sea. But μέσσος is often used in an indefinite way and the point has not been pressed. Asteris is also οὐ μεγάλη, and again the phrase is not enlightening, unless, as some Ithakists suggest, there is *litotes* and the phrase means 'very small.' In that case it is much better of Daskalio, which is about 240 yards long (von Marées), than of Arkoudi, which is fully two miles in length.¹¹ And Asteris is πετρεσσα or 'rocky,' and that applies perfectly to Daskalio, but not to Arkoudi, which Paulatos describes as γαιώδης and not πετρώδης, and which has pasturage in places.

So far the description favours Daskalio, but the rest of it—*λιμένες δ' ἐν ναύλοχοι αὐτῇ ἀμφίδεμοι*—raises much difficulty. The Leukadists point with triumph to 'twin havens' in Arkoudi, and photographs of these are given by Goessler and Seymour (*Life in the Homeric Age*). This is perhaps the best piece of evidence in favour of Leukas. Bérard in fact declares (*op. cit.* ii. 483) that it is the 'one solid argument' in Dörpfeld's whole Leukas-Ithaka case.

The meaning of the words has first to be determined. *ναύλοχος* has not attracted the attention of the commentators or the disputants. It is generally accepted as = 'suitable for the accommodation of a ship' or 'affording a safe anchorage' (L. and S.), as in its only other Homeric occurrence, ε 141. Thomopoulos, *Das homerische Ithaka*, 15, gives 'suitable for lying in wait in,' that is, for a proceeding that must have been common in Homeric times. The rendering is supported by *ναυλαχέω* in later Greek, and by the eight occurrences of *λόχος* and *λοχάω* in the references to the Wood's plot. But the point must be left open, and it is doubtful if the

¹⁰ Maser (*Agam. Days*, 384) gives its width as 18 miles, which is too great—Arkoudi really seems not to be in a strait at all. If it was 2 miles further W., it might be so described.

¹¹ There is room on Daskalio for the ruins of

two churches, a reservoir and a tower. Probably, as Mr. Wood tells me, there had been a monastery there or some such religious institution, whence, as in other similar cases, the name, corrupted from *Δεσκαλειός*.

Ithakists could derive much benefit from the interpretation, even if they could establish it.

The words λιμένες ἀμφίδυμοι are more important and are variously translated,—‘havens with double entrance,’ ‘a haven with a double entrance,’ or simply ‘a double haven’ or ‘two havens.’ Consulting some eighteen commentaries and lexica, I find a decided preponderance in favour of the last.¹² The word ἀμφίδυμοι is treated as the equivalent of εἰδυμοι, and the presence of ἀμφί is taken by four editors as meaning that the two havens were on opposite sides of the island. This would be against the Leukadists as is also the possible interpretation given by Seymour, *op. cit.* 72, “with a double entrance,” like Sphacteria. But it cannot be denied that the meaning may be only ‘twin havens’ or ‘a pair of havens,’ and that the pair found in Arkoudi may correspond to what the poet had in his mind.

One thing is certain, the Ithakists cannot shew a real λιμήν on Daskalio at the present day, and some of them in consequence abandon the islet. Bérard (*op. cit.* ii. 492) finds a double brèche or indentation in the rocky shore, and it may be the remains of a double λιμήν.¹³ And see Paulatos, ἡ πατρίς τοῦ Ὀδυσσεύς, 123, and Vollgraff, *loc. cit.* 621, both of whom speak from personal observation. The Ithakists here in fact have recourse to the possible changes that the sea, the atmosphere and earthquakes may have wrought in 3000 years.¹⁴ These must, as stated above, be borne in mind, especially as Daskalio is formed of a calcareous rock,¹⁵ and the great erosion which Heligoland has suffered is brought in evidence (Lang, *op. cit.* 46, replied to by Goessler, *W. kl. Ph.* 1906, 95). Part of Daskalio may have been destroyed, or much of its shore may have been worn away by wind and tide. But it is only a possibility. The fact remains that to-day, as in Strabo’s time, Daskalio offers οὐδ’ ἀγκυροβόλιον εὐφύες.

At Arkoudi the Leukadists have found and photographed the twin havens. These must have been hard to find, for Professor Manly, *Ithaca or Leukas*, 36, declares there was nothing of the sort on the island, and he accompanied Dörpfeld on a visit to it (Griseh, *Dörpfelds Leukas-Ithaka Hypothese*, 26). Paulatos says the same. But there are the photographs! But do these exhibit two real ‘havens’? A short strip of land, called by Dörpfeld a ‘natural mole,’ runs out to a knoll called an islet and has a bay on either side. The bay to the left can hardly be so called, for the shore seems to stretch away in a straight line. If these are ‘havens,’ then sandy shores on either side of any jutting spit of land may be so designated. Paulatos sees only a διπλὴ ἐγκόλπωσις, and Michael only ‘landing-places.’ They are said to be on the S.E. of the island, and are no

¹² ἄντα ἀμφίδυμοι, in *Argonautica*, A 959 f., is rendered by M. Sarton, ‘(and the Ithacus has) double shores.’ Thomopoulos’ explanation based on Apoll. Rhodius’ words seems untenable (*op. cit.* 17 f.).

¹³ See the photographs he gives, and the frontispiece to B. Lang’s work.

¹⁴ But there does not seem to have been great change between Strabo’s days and now.

¹⁵ A particularly hard variety, von Maries says. The discrepancies as to such matters are, as Rothe has observed, a remarkable feature of this controversy.

doubt protected from northerly winds, but they appear to be open to wind and wave from the S. It would be a poor swell that this 'mole' would be a protection against. But at least the Leukadists can say they are much better than anything that Daskalio can shew. Professor Munatt accepts them, though he is not, I gather, a Leukadist (*op. cit.* 384 and 358 n.).¹⁴

Besides, however, the possibility of change between Homer and Strabo, and another consideration which will be noticed presently, the Ithakists can supply one other identifying mark. In Strabo's time Daskalio was still known as Asteria. That is at least as good evidence as the havens of Arkoudi, though Gustav Lang, when he sees the name Asteris,¹⁵ *Streichen*, change to Asteria, *sternförmliche*, as the spits of rock which gave the former name disappeared under the onslaughts of natural influences, seems to yield to that weakness for pushing arguments to an extreme length which is characteristic of this Leukas question.

The view of that patient investigator, Bérard, remains to be stated. There is a double haven at Phiscardi, on the coast of Cefalonis, some two miles N. of Daskalio. He takes these as the Twin Havens, comparing the Καλὰ Λιμῆνες known elsewhere. He points out, though he does not, as some have asserted, adopt the resource, that if we read *ἐν* for *ἐν* in § 846, there is no difficulty. 'There is an island Asteria, with twin havens hard by.' But he prefers to rely on erosion for the disappearance of the havens from Daskalio itself, and to find the *ἄπας ἡρεσιότατος*, along which the Wooers set their watch (π 365) while waiting for Telemachus, on the mainland of Cefalonis. And that is no improbable suggestion, for, as others have observed, it is difficult to believe that the poet conceived of 'windy heights' in a very small island. *ἡρεσιον* in π 367 may possibly point in the same direction. The uses of the word are discussed by La Roche, *Ithaka*, 489.

This leads to a further consideration which is insisted on strongly by the Ithakists, and freely admitted by the more moderate among their opponents, as Cauer, *Grundfragen*,² 255, and Reissinger, quoted by Michael, *op. cit.* 14,—that the poet must be allowed some (Cauer says 'full') freedom with the scenes he requires for his stories, even though, as the poems abundantly shew, he had considerable local knowledge. There are two extreme views on this point. One is that certain places,¹⁶ as this islet of Asteria, existed only in the poet's imagination, that they are, as the Germans

¹⁴ This paragraph was written before I had seen Professor Munatt's paper. I now add the following extract from it, p. 36, opposite which will be found a photograph of the double harbour. 'An examination of the coast line under the guidance of Dr. Bergfeld showed, however, no such harbour. The eastern shore of the island, where the double harbour is said to lie, is practically a straight line from which a rocky strip, a few yards wide and four to six feet high, extends at right angles to the shore to a distance of about seventy-five yards. The

surface of this rocky strip shows, no way to be seen from the accompanying cut, that the water dashes over it readily, so that the whole shore is entirely unprotected and cannot be said to have any harbour at all.'

¹⁵ Paulatos, *op. cit.* 122, explains the name from the sparkling of the stone—*ἀστέριος* *πυρρῆς* *ἀπὸ τοῦ ἀστέρος*.

¹⁶ The places mentioned in the Wanderings of Odysseus, commonly included in the 'Outer Geography' of the *Odyssey*, are not here in question, but only the *Schaulands* of the epic.

put it, *rein erdichtet*¹⁹; the other, represented by Dörpfeld above everybody, that Homer's descriptions are accurate representations of then existing facts, and that we can, by careful enquiry, recover every feature which he mentions. Both are, one might almost say by general consent, erroneous. The truth seems to lie between them. Homer knew the ground on which the action of each poem took place, but that is not to say that he knew it with fulness and exactitude, or that he did not at times, for the purposes of his story, take a certain amount of liberty with it. Dörpfeld knows as well as any one how true this is of Troyland; yet he will not contend that we can identify every Homeric point in that region, though those which elude us seem to become fewer year by year. But in the Ionian islands he insists, as Gruhn says, on 'every pebble,' and Caer, *i.e.*, describes this initial assumption as a cardinal error in the great archaeologist's investigation.²⁰ Caer's demand for full freedom for a poet is reasonable.²¹ Mr. Gladstone reminded us long ago (on the 'Dominions of Odysseus', *Macmillan's Mag.* xxxvi.) that 'Homer had no map. He had his eye, and he had the reports of others; and out of these he had to construct a map in his own brain.' That map cannot have been perfect. His fancy had to complete it, and his story prescribed what have been called 'accidental details.'

This being granted, Bérard perhaps points the way to a satisfactory solution for Asteris. We have in Daskalió a rocky islet that has much correspondence in its nature and position with Homer's description, and, as we shall see, admirably suited for the poetical purposes for which the poet uses Asteris. It had, one may concede for the moment, no haven. The poet wants one. Near by on the mainland are the Twin Havens, of which he has doubtless heard. He transfers them, and even perhaps 'windy heights' for scouts to look out from, from the mainland to his small rock. Is the assumption that he altered things as he found them to this extent for his story a violent one? *Pelimusque damusque vicissim*. Let not Leukadists object. It seems trivial compared with some of their expedients,—as the voyage W. of Cefalonia, the submergence of the Montague Rocks, or the interpretation of *éxas* or *πολυβερθίς*. This latter word, in its accepted signification of *valde profundus*, suits the bay at Polis, but not that of Vlichó. Therefore it must be rendered *ein tief sich ins Land erstreckender Hafen!*

There remains to be considered the comparative suitability, in regard to position—which, as Vollgraff observes, *l.c.* 621, is much more important than mere local character—of Daskalió and Arkoudí respectively for the ambush described, and this involves the question of the return voyage of

¹⁹ Heckenrath, who is not a partisan, finds in the later name *Arbela* sufficient ground for holding that Asteris is not an invention (*B. jhb. W.* 1919, 1279).

²⁰ Dörpfeld's full confession of faith on the subject of the verity and actuality of all in Homer will be found in his review of Croiset's

Légende in W. kl. Ph. 1912, 1041 ff.

²¹ La Roche (*op. cit.* 485) recalls the familiar lines of Homer,

*πῶτερ-βας ἄλκιυ ποῖα
quidlibet audendi semper fuit aequa potestas,
scimus, et hinc veniam pelimusque flavonogus
vicissim.*

Telemachus. As regards suitability, honours seem to be even. If Telemachus returned to Skydhi, as Dörpfeld alleges, Arkoudi is well placed, though, as Paulatos notes, it is unnecessarily far from the capital at Nidri. There is a small island, Theleia,²² much nearer home, lying between Leukas and Meganisi. But the Ithakists have equally good ground for approving the situation of Daskalió. It is opposite Polis and only some two miles from it. It commands the strait, and, low as it is, one can see over the sea to the S. as far as the Peloponnesus (Bérard, *op. cit.* ii. 493). The objection taken by the Lenkadists, and one which they will apparently never give up, is that Telemachus might land, as he actually does, at the S. end of Thiaki. See e.g. Goessler, *op. cit.* 50, von Marcés, *Le.* 237, and even Seymour, *op. cit.* 71. The objection seems futile. The Wooders did not know of Athénos's warning, and would assume as a matter of course that Telemachus would return to Polis the way he left it.²³

As regards the return journey and the injunction that governed it, *ἐκὸς ῥήσας ἀπὲρχειν ἐκέρχεται ῥῆσ*, we have seen how the Ithakists conceive it. On the other side I need only state Dörpfeld's case as he propounded it and has since changed it. First, he maintained that Telemachus sought the high sea to the West of Cefalonia and landed in Vasílikí bay in the S. of Leukas. But the objections were so formidable that he gave Telemachus' course a new direction, *ἐκὸς* being made a veritable 'portmanteau word' into which was packed the complicated meaning, *zwischen den Inseln durch, aber fern von ihnen*. But this was just as bad,²⁴ as Reissinger appears to admit (Gröschl, *op. cit.* 27 f.). We are now to suppose (see the *Zusatz* in Dörpfeld's *Leukas*, 16) that Telemachus proceeds up the strait past Asteris to Leukas, where he lands in the bay of Skydhi.²⁵ What then is the meaning of the warning? Telemachus, in this view, not only cannot get any good from keeping away from the coast of Thiaki on one side and that of Cefalonia on the other, but, more and worse than that, his course takes him close to the ambush at Arkoudi.

But in fact further discussion of the return journey is unnecessary, for

²² Apparently Tiglia on the chart in Bérard, ii. 419.

²³ The vexed question of the site of the capital on Thiaki cannot be discussed here, but my impression is that opinion preponderates in favour of Polis. Among the old papers on the Ithacan question Mr. Gladstone's is still good. Among the moderns, von Marcés is against Polis, and Vollgraff's paper, which I have quoted more than once, is in reply to him. See also Bérard, and Mr. Allen in *J.H.S.* xix. 304. But there is no want of literature on the subject. The name Polis looks like a survival, and the depth of water in the bay corresponds to the Homeric *καλὸς ὁρμαῖς*. With Polis there is little difficulty in getting a satisfactory conception of the events in Ithaka, the

incidents of Telemachus' trip, and the departure of Hermes to s., according to the narrative of the *Odyssey*. It may at least be said that there are fewer difficulties with Polis than with any other site.

²⁴ So bad that Goessler (*op. cit.* 52) seems disposed to adhere to the first interpretation of *ἐκὸς ῥήσας*, which he declares to be not only grammatically accurate but also *schlicht und einfach*.

²⁵ Chosen because apparently Dörpfeld found on Evgira, near Skydhi, for the dwelling-place of Eumaios. Hennings, however (*B. ph. W.* 1898, 630), denies that the site could get shelter from the North wind (§ 233) at Evgira. They would be the site for the standing and *Κόρατος πύργος* N. of S. Andrea.

Dörpfeld now holds that the opening passage of *o* is a late insertion. As he had himself objected to the excision of lines by other authorities, he was naturally blamed for resorting to the same plan himself. His reply to that is in *W. M. P.* 1905, 1842, and is to the effect that he did not excise the lines; he only accepts the athetesis of others made on philological grounds. But the receiver in such a case is surely as responsible as the original depredator, and to those who do not admit the spuriousness of the passage this part of Dörpfeld's case seems to fail entirely. I cannot of course discuss the grounds on which the critics (see Ameis-Hentze's *Anhang*) mangle the lines in question, no two of them agreeing as to the spurious parts. They are really excellent specimens of the stuff that the Homeric criticism of the nineteenth century was made of. They will be found in Kammer, *Einheit der Odyssee*, 622 ff. It is enough to say that Monro and Hayman and other editors do not consider them worth noticing, that Blass' manipulation of the passage leaves Athené's instructions intact, and that, if any one be curious to see how the reasons appear in the light of common sense, he will find a full reply in Bücheler's *Zur Odyssee*, 23 ff. Dörpfeld promised to support the athetesis by a *Tagesplan* of the *Odyssey*, but I am not aware that this has ever appeared. The discovery that Theodolymenus was Athené was also to help the Dörpfeldian view, but nothing more has been heard of it.

The result seems to be that in situation, character, and suitability for the ambush, Daskalio is at least as good a claimant as Arkondi. As regards the *ῥῆσος βοῶν*, the injunction to keep clear of the islands, and the course of the journey back to Ithaka, we get, on the supposition that Daskalio is Asteris, a clear and consistent view with a minimum of difficulty. We cannot say the same of Arkondi. The balance of probability is thus against Dörpfeld's position, and I think the same may be said of nearly every other branch of his case, and that he falls far short of the discharge of the onus which is on him.⁶⁶ I venture here to state summarily the conclusions which I have come to on some points after a somewhat close examination of the voluminous literature. On others the battle may be allowed to be drawn.

1. That the *Catalogue of the Ships* in the *Iliad* and the last book of the *Odyssey* are 'late' is assumed by Dörpfeld, and described by Rüter as the *Grundriss von Dörpfelds Hypothese*. It is really its fatal weakness. It used to be a commonplace of old Dissecting criticism that the *Catalogue* is late, but Messrs. Allen, and Thompson and Wace (*Prehistoric Thessaly*, 254 n.) and others are of a very different opinion. The *Catalogue* reflects pre-Dorian conditions, and Dörpfeld admits that in it Ithaka is *Thiaki*.

⁶⁶ He has been subjected to merciless criticism even in his own country, especially by Engel (*Die Wohnorte der Odysseia*), who is not an armchair critic but speaks after visiting the islands. Strong as his exposure of Dörpfeld's methods is, it must be admitted there is good foundation for it. Dörpfeld

impresses one as establishing a point with satisfaction to himself by giving some evidence for it and then insisting on it strongly as proved to demonstration. 'I believe . . . and I can prove it' is a sort of final formula with him (Maass, *op. cit.*, 331, 333, 337).

It is the same with *ae*. More than one defence of the genuineness of that book have appeared recently. I refer especially to those by Rothe and Behmer. See also three papers in *Gloss. Philology*, viii. and ix.

2. The ease with which Dörpfeld recovers all the Homeric landmarks in Leukas should not deceive us. Engel, who knows the ground, questions them all, *op. cit.* 4 f. But, apart from that, we must remember that all have been found in Thiaki, that Goekoop (*Ithaque la Grande*) has found them all in Cefalonia, and that Mr. Samuel Butler found them all, in very convincing fashion, years ago at Trapani in Sicily! *Omens solum fortis Ithaca est*: for hills and havens, and caves and cliffs and springs, and even Mycenaean remains are not rare in these islands.

3. Dörpfeld has not proved²¹ that Leukas was an island in Homeric days, and some refuse to believe that all the engineers and geologists the Kaiser may depute can ever prove it. Others, again, are satisfied that it does not matter whether it was so or not. Leukas could be regarded as an island, perhaps merely for the poet's purpose, as Wilamowitz at once objected; or again, it might be regarded as part of the mainland. See Finler, *Homers*,²² 14; Cauer, *op. cit.* 242; Michael, *op. cit.* 12 f. and Engel, *op. cit.* 31 f.

4. Dörpfeld cannot prove that the settlement he has found at Nidri is Odysseus' palace. The appeal to Hissarlik is nugatory: in that case there was good reason *ab initio* for believing that Priam's fortress had once existed in the very locality. In the present case there is reason for believing on the Homeric text that Odysseus was not housed in a Mycenaean keep, but rather in a building that would not leave much sign after 3000 years. Mycenaean remains may prove too much. Goekoop is confident that Kavalias will find Odysseus' palace in Cefalonia, and that he will live to hear 'the φάσμα of Phaulos played in the Megaron.' The remains in Leukas have yet to be dated and co-ordinated with others. The descriptions of them are various,—prehistoric, Aegean, Mycenaean, Aegean-Mycenaean, mid-European. See Prof. Myres' remarks in *The Year's Work*, 1906, 6 f. and 1907, 39, and Mr. Thompson, *loc.* 133 and n. And cf. Seymour, *op. cit.* 76; Sitzler, *Aesth. Kommentar*,²³ 176; Engel, *op. cit.* 13 f. and 40 ff., and Dörpfeld in *H. kl. Ph.* 1909, 1185 ff. and 1912, 1081 ff., and his *Vierter Brief*. Hennings, in *B. ph. W.* 1908, 619 f., objects strongly to Nidri as the site of Odysseus' palace. The ground has been described as low-lying and even swampy.

5. Dörpfeld believes, and tells it *als ob es dabei gewesen wäre* (Engel), that the Dorians came into the then Ithaka, drove its inhabitants into Thiaki,²⁴ and called the then Ithaka Leukas. It is a mere suggestion, and there is nothing in the tradition to support it. Seymour, who seems to approve, can cite no evidence. Sitzler, *op. cit.* 175, considers it most unlikely,

²¹ The discussion has become very involved, and many authorities might be quoted pro and con. I note that Vollgreff (*loc.* 617 n.) is not convinced. The statement in *J.H.S.* xvii. Procs. 2111, that it had been always considered that Leukas was an island in 1000 B.C.,

was extremely premature.

²² Rothe (*Die Odyssee als Dichtung*, 535) thinks it strange the ancient did not go further on, as to the richer and more distant Zante. They remained just on the other side of the 'strait' from the Dorian Peninsula.

See also Rothe, *op. cit.* 317, Engel, *op. cit.* 8 f. and 11, Gröschl, *op. cit.* 39, *Athenaeum*, No. 4087, 241, etc.

6. The famous passage α 21 ff. will probably never be satisfactorily interpreted in every particular as it stands. But one thing is taken as certain by many authorities, that the first word in the sentence, ἀμφὶ δὲ νῆσοι πολλὰλ ναιετάουσι, cannot be applied to Leukas, which has not a single island either to W. or N.

7. I cannot ascertain that it ever occurred to any one before the days of Leukas-Ithaka to take the line, which occurs four times in the *Odyssey*, and is addressed to new arrivals in the Homeric Ithaka, οὐ μὲν γὰρ τί σε πεζὸν διαπαί ἐνθάδ' ἰκέσθαι, as anything but a small joke.²⁹ See the commentaries. The reviewer in the *Athenaeum*, *loc. cit.* refuses to take seriously the argument Dörpfeld bases on the line. So Miller in *Preuss. Jahrbh.* cxvii. 304. When he, Dörpfeld, goes on to say that the Witz is not appropriate at the 'solemn moment' when Odysseus is recognised by his son, he seems to forget the freedom with which Homeric formulae are at times employed.

8. The positive evidence from the epithets which Homer gives to his Ithaka is on the whole against the new theory. Especially, the descriptions οἷδ' ἐν πέλα, ν 243, and οὐχ ἱππύλατος . . . περὶ πασίων, δ 607 f., are much less appropriate of Leukas. Engel affirms that there are 30 sq. km. of pasture on it. If that be so, one wonders that Odysseus, its lord, should ever have sent his herds to the mainland. See Hennings in *B. ph. W.* 1908, 618, Rothe, *op. cit.* 328 f., Engel, *op. cit.* 23 and 30 f., and Dörpfeld, *W. id. Ph.* 1909, 1186.

There is also, as first pointed out by Wilamowitz, strong negative evidence in this, that Homer does not refer by epithet or otherwise to what is described as a most imposing feature of Leukadian scenery, the white cliffs which are said to rise from the sea to a height in places of 300 m. or over 900 feet. A photograph of these great grey walls in the vicinity of C. Dukato may be seen opposite p. 48 of Weber's *Im Banne Homers*.

9. The Λευκὰς Πέτρῃ of α 11, now generally identified with C. Dukato, cannot be inside Homer's Ithaka. Hermes, with the souls of the Wooers under his wing, leaves Odysseus' abode for the ζῳόος. Be that due W. or N.W., the god, starting from Nidri, would not go first S.W. to the cape. The description suits Thiaki. From Polis, Hermes makes for the sea (Λευαροῖο βόα) and then passes the Πέτρῃ on his way to the Beyond.

10. Homer in χ 197 (and cf. φ 244 and 347) represents the sun as rising to dwellers in his Ithaka from the streams of Ocean. That again is less appropriate of Leukas, lying W. of an enclosed bay, than of Thiaki with a much wider stretch of sea between it and the mainland.

If there were any hope that Dörpfeld's book on the whole subject, promised as far back as 1905, would add some additional arguments, one might well pause before coming to a final conclusion, but there seems to be

²⁹ Paulsen quotes modern Greek equivalents. But Vollgraf, though he objects to Dörpfeld's inference, does not admit it. *Ph. W.*

none. Dörpfeld has spoken frequently since he first propounded his hypothesis, but, apart from the local excavations and investigations into the *Inselnatur* of Leukas, there seems to be nothing new. Meantime the opposition gathers strength with every year, and now includes Rothe, Finsler, Vollgraff and Drerup. The Leukadists are certainly outnumbered. Cauer is nonplussed. *Also Fragen über Fragen! statt befriedigender Lösung neue Rätsel!* (*op. cit.* 255). He would believe, if he could, but Dörpfeld requires of his disciples a whole-hearted view of Homeric realities which to Cauer is impossible of acceptance. It is a view that must incline all who hold the Homeric Unitarian creed to pray for Dörpfeld's full success, but the present position of the question does not warrant the hope that that prayer will be answered, and the controversy must apparently continue to be carried on. Of enquiries on the spot there have been plenty; Mr. Gladstone's hope, in his last words on the old Ithakan dispute, has been fulfilled over and over again. But still there is no peace. Dr. Leaf, a convinced Leukadist, would lay us all under a lasting obligation if he could but be induced to give us an autopsy such as he has given us for Troyland.

A. SHEWAN.

NOTE.

Partial bibliographies of Leukas-Ithaka will be found in Draheim's *Die Ithaken-Frage*, Berlin, 1903, and *Der gegenwärtige Stand der Ithaken-Frage* (W. kl. Ph. 1906, 1361 ff.), in *Class. Phil.* vii. 210, and in Drerup's *Omero*, 240 n. Rüter in his *Mit Dörpfeld nach Leukas-Ithaka* (Halberstadt, 1911) mentions many names, and Paulatos to his ΠΑΤΗΣ ΤΟΥ ΟΔΥΣΣΕΟΥ seems to quote almost every work that has ever been published about Ithaka. Add to these the volumes of the W. kl. Ph. and B. ph. W. since 1900, and Rothe's reports in the *Jahresberichte des philologischen Vereins zu Berlin* for 1905-7, 1909-10, and 1912.

The only discussions in English known to me are Professor Marly's *Ithaca or Leuca*, Missouri Studies, 1903, Seymour's *Life in the Homeric Age*, 69 ff., Manatt, *Argos Ithaca*, 376 ff., Leaf in *Proceedings of the Hellenic Travellers' Club*, 1911, 21 ff., *J.H.S.* xxvii. Progs. xliii. ff., and xxx. 394 ff. (Mr. Allen on the Homeric Catalogue), and Dr. Mouro in *C.R.* xix. 240 f. Besides these notices, none of them very exhaustive, a few reviews have appeared, the only one of any importance being of Gosseler's work in the *Athenaeum*, &c.

PASSAGES IN THE ODYSSEY.

The Wooden plot against Telemachus, and Antinous asks for a ship, δ 670 ff.:

ἔφη μοι αἰεὶς ἴοντα δοχέσασθαι ἥδε φυλάξαι
 ἐν παρθρῇ Ἰθάκῃ τε Σάμῳ τε πειραιεύσσῃ.

A ship is got ready, δ 778 ff. and sets out, 842 ff.:

μοιροῦμαι δ' ἀναβάντες ἐκπέλειον ὑγρὰ κελυσθα,
 Τηλεμάχῃ φάσμα αἰεὶς ἐπὶ φρεσὶν ἀρμυῖοντες·
 ἵασι δὲ τῇ αἴθρῃ μέγαν ἄλ' ἐπύρηναν,
 μισσηγὴν Ἰθάκῃ τε Σάμῳ τε πειραιεύσσῃ,
 ἥατις, οὐ πύργῳ λαίρην δ' ἴσι πύλας αὐτῇ
 ἀφρόδισιν· τῇ τῷ γε μέγαν δοχέσασθαι ἄχαρι.

In the fifteenth book Athena proceeds to Lacedaemon and instructs Telemachus as to his return journey, π 28 ff.

μηστῆρας δ' ἐπιγῆδαι ἀριστῆας λοχέουσιν
ἐν πορθήῃ Ἰθάκῃ τε Σάμοϊ τε πεισιβοόισι τε,
ἱεμεναι κτάσσει, πρὶν ποτρίδα γούναϊ ἵσθαι,
ἀλλὰ τὰ γ' οἷα δῖα· πρὶν αὖτις τινα γαῖα καθέξει
ἀνδρῶν μηστῆρας, αἳ τὰ βίοντες κατέθουσιν,
ἀλλὰ ἑκάς τῆσσι ἀπέχεται εὐεργία ἔσθῃ,
τοκτὶ δ' αἰεὶ πλείων· πέμψας δὲ τὰς εἰρῆας ἐπισθῆναι
ἀθανάτων ἐκ τῆς σε φιλῶσιναι τε βέβηται τε.
αὐτὰρ ἐπεὶ πρῶτην ἄετ' Ἰθάκῃ ἀφίκεται,
ἔσθῃ μὲν ἐς πέδις ἀγρόν τε καὶ περὶ πύργους,
αὐτὰς δὲ πρῶτα σταβίτῃ ἐκταφινίσθαι.

His departure is described later in the same book. The ship is prepared for sea, and Athena provides a breeze, π 92 ff.

τοῖσι δ' ἱμενον ὄθρον ἰαί γλαυκῶπις Ἀθήνη.
λαῖβρον ἐπαγίζοντο δὲ αἰθέροι, ἔφρη γαῖα τε
ἔσθῃ ἀνέστη βένετα θαλάσσης ἀλαερίε Ἰθάκῃ.
[βῆναι δὲ παρὰ Κρονίου καὶ Χαλκίδα ἐκδιαιρέθων].
ἄσπετον ἔ' ἥδ' αἶας σπείωντο τε πᾶσαι ἀγούαι
ἢ ἐὶ Φοῖβε ἐπιβάλλειν ἐπειγομένη Διὸς αἴρω,
ἥδ' αὖτ' Ἥλιδος ἔμνη, δέη ἀρτίοντα Ἑσπεῖα.
ἔσθῃ δ' αὖ νῆσταισι ἐκπαροίηκε θυμῷ,
ὀρμηδύνῃ ἢ κεν θῖνατος φύγῃ ἢ κεν ἀλῇ.

The scene then changes to the hut of Eumaeus, where he and the disguised Odysseus converse and sleep. At dawn Telemachus and party reach Ithaka, and disembark and take δέκεται, 495 ff., and Telemachus bids his men row the ship to the town, while he himself proceeds to the stabling of Eumaeus. There the swineherd is sent to the town to inform Penelope, Telemachus recognises his father, and the poet reverts to the ship, π 322 f.

ἢ δ' ἄρ' ἔπειτ' Ἰθάκῃν ἐκτέλγειν εἰς εἰρηγῆς,
ἢ φέρε Τηλέμαχος Πολόδεα καὶ πύργους ἐκείωνται.

The company disembark and send a messenger, who foregathers with Eumaeus, to tell Penelope that her son is in the country. The Wooers hear the news and take counsel together, and Eurymachus asks for a ship, that he may go and bring back Antinous and the ship they had sent out. But, as he is speaking, Amphinomus sees from where he sits their ship itself already inside the haven, and Antinous, when all are again together, tells how their plan had miscarried, π 364 ff.

ἂ πότνη, τίς τινδ' ἄνδρα θεοὶ κακώτατος ἔλυσαν,
ἥματα μὲν σκαπὸν ἔχον ἐπ' ἄρνας ἡμερόστας
αἰὲν ἐπασσύντοιοι· ἄμα δ' ἥλιος καταδύσσι
αὖ ποτ' ἐπ' ἡπείρου ἰσάτ' ἴσταντο, ἀλλ' ἐνὶ πότι
σὴν θοῇ πλείοντες ἐμύνημεν Ἥδ' ὅμως
Τηλέμαχον λαχόντες, ἵνα φθίσωμεν ἄνθρωπον
αὐτῶν· τὸν δ' ἄρα τῆος ἀπῆγαγεν οἰκοδὲ δαίμων.

Just how Telemachus' ship slipped past them and got to the town before them is not explained. That they did see her and follow her may be inferred from the fact that they arrived immediately after her. The only reference to the point is in Amphinomus' words, π 355 ff., after he has seen the Wooers' ship already in harbour.

μή τίς τ' ἐπ' ἀγγελίῃσιν ἀρτίοντα· οἷδε γάρ τ' ἐδον,
ἢ τίς σφιν τοῖδ' ἔειπε θεῶν, ἢ εἰσέειπ' αὐτοῖς
τῆς παρερχομένης, τῆς δ' οἷα ἐδόντατο κελύου.

ON THE LONG WALLS OF ATHENS.

According to the view which has long held the field and is still the most widely accepted, the Long Walls which the Athenians constructed in the fifth century to connect their town and harbour were three in number, viz., two outer walls extending respectively to the northern and southern sections of the harbour fortifications, and an intermediate wall running longitudinally in the gap between the outer pair.¹

This theory rests on evidence which *prima facie* appears very strong. Harpocration distinctly enumerates three walls, known respectively as the Northern, the Southern or Middle, and the Phaleric one, and in support of his statement he quotes a passage from Aristophanes, in which three walls are likewise mentioned.³ The same number of walls also seems to be implied in a passage of Thucydides, where mention is made, firstly, of a Phaleric wall, and secondly, of 'Long Walls,'⁴ which should presumably be identified with the Northern and Southern walls of Harpocration, so as to make three walls in all. A triple line of fortifications is also suggested by the current expression 'διὰ μέσων τειχέων,'⁵ which may be taken to mean an inner wall running between an outer pair.

On the other hand there are numerous passages in ancient texts which make mention of two walls, and two only.³ The usual explanation of this discrepancy is that during or after the Peloponnesian War one of the three walls (the Phaleric one) was demolished or neglected, and that from the fourth century onward only the Northern and Middle ones remained.⁴ This view is commended by the fact that all the texts referring to a double

³ Leake, *Topography of Athens*, I, p. 428; Curtius, *Stadtmographie von Athen*, pp. 111-2; Wachsmuth, *Stadt Athen im Altertum*, I, pp. 323-4; Kaupert, *Monatsschrift der Berliner Akademie* 1879, pp. 523-55; Jendassch, *Topographie von Athen*, pp. 141-2; Ogebe, *Hildesg of Greece* (1918 ed.), iv, pp. 505-4; v. Meyer, *Geschichte des Altertums*, iv, p. 35; Fuselli, *Ortskunde Geschichte*, III, p. 219.

Ἐξ. 3. ἃ μένου ταῖς καὶ τριῶν ἑταί-
 ραρχον ἐν τῷ Ἀγίῳ, ὅτι καὶ Ἀποστολὴν ποιεῖ
 ἐν Τριφιδίᾳ, ἐν τῇ Βορσίᾳ καὶ ταῖς ἐστίαις καὶ
 καὶ Φαλκίᾳ, ἥτις μένου ταῖς καὶ τριῶν τῶν
 ἑταίρων.

* B. 13. 7: τοὺς τε γὰρ φαιγεῖσιν καὶ ποῖσιν ὁμοῖον ἔσται πάντα καὶ τριέννητα . . . τὰ δὲ ἀπὸ καὶ πάλιν πρὸς τὴν ἑξαμῶν τριεννιότητα σταθμῶν.

^a Antiphon fr. 37 (ed. Mass); Cratichne sp. Plutarch, *De Gloria Athencorum*, p. 351 a; Plutarch, *Pericles*, ch. 13 § 3; Schol. ad Plat. *Gorgias*, 453 x; Harpocration s.v. (see n. 2 above).

* The passages in question are enumerated in *ibid.*, pp. 422-3.

² Leake, pp. 428-7, followed by most later writers.

line of walls belong to the fourth or later centuries. But an alternative theory has been set up by Prof. E. A. Gardner, who maintains that *there never were more than two walls*,⁷ and a closer inspection of the evidence may show that this solution of the problem is the more likely.

In the first place, considerations of common sense tell against a triple line of fortifications. If a double line was quite sufficient, as the event proved it to be, why did the Athenians ever trouble to build three walls? In answer to this it has been suggested that the original scheme of fortifications comprised only the Northern and the Phaleric walls, and that an intermediate wall was subsequently constructed in order to strengthen the defences on the maritime side.⁸ Now this hypothesis is plausible enough from the standpoint of those scholars who locate Phalerum near Cape Colias at the east end of the Phaleric Bay and consequently represent the Phaleric wall as meeting the coast at a considerable distance from the Northern wall, which undoubtedly ran to Piræus.⁹ A couple of walls built on such a plan would certainly need to be supplemented by an intermediate fortification, for the wide expanse of Phalerum Bay would otherwise have been left defenceless. But, to say nothing of the obvious folly of the Athenians in leaving their sea front unguarded until by a happy afterthought they built the necessary third wall, the location of Phalerum at the east end of the bay is almost certainly a mistaken one, and the Phaleric wall cannot therefore have taken this direction.¹⁰

If on the other hand we follow Leake and most modern authorities in placing Phalerum at the west end or centre of the bay and in giving the Phaleric wall an abutment on the Piræus fortifications, the *raison d'être* of the Middle wall disappears. It would not materially strengthen the defences between harbour and city, nor yet would it reduce the length of lines requiring to be held to any appreciable extent. *A priori*, therefore, the existence of a third wall is not at all probable.

Again, the expression '*διὰ μέσων τείχεσ'*' does not prove anything as to the number of the Long Walls. It may be taken in quite a different sense from that which is adopted by Harpocration and most modern critics. In a passage of Dio Chrysostom, already noticed by Leake, we read: *διακοσίων σταδίων εἶναι τὴν περίμετρον τῶν Ἀθηναίων, τοῦ Πειραιῶς συντιθεμένου καὶ τῶν διὰ μέσων τειχῶν*.¹¹ The plural form *τειχῶν* suggests that the reference is not to a single piece of masonry, but to a whole complex, and the general context proves that the extremes between which the *τείχη* lay were not a couple of other walls, but Athens and Piræus. '*διὰ μέσων τείχεσ'*' here is nothing but a synonym for the Long Walls as a whole.

A similar usage is found in the scholia to Plato: *διὰ μέσων τείχεσ', ὃ καὶ ἄγχι νῦν ἐστὶν ἐν Ἑλλάδι· ἐν τῇ Μουνυχίᾳ γὰρ ἐποίησε (Περικλῆς) καὶ τὸ μέσον τεῖχος τὰ μὲν Βάλλαν ἐπὶ τὸν Πειραιᾶ, τὸ δὲ ἐπὶ Φάληρον*.¹² In this passage it is clear that the '*μέσων*' or '*διὰ μέσων τείχεσ'*'

⁷ *Ancient Athens*, pp. 68-71.

⁸ Leake, p. 427.

⁹ So Curtius, p. 110; Raupert, pp. 682-4.

¹⁰ Gardner, pp. 57-8, 562; Judeich, p. 118.

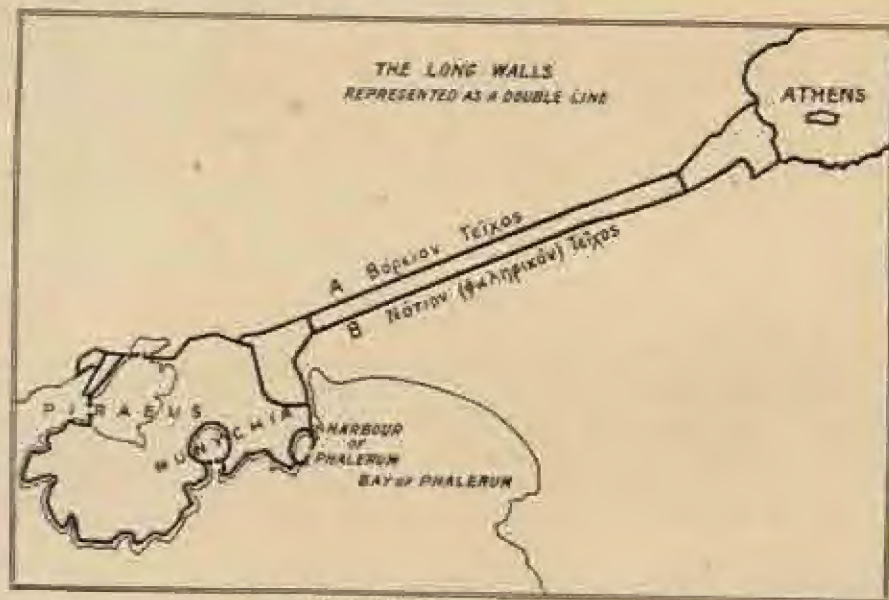
¹¹ *Or.* 6 p. 98 (ed. Dindorf).

¹² *Complut.* 455 E.

consists of two different fortifications.¹² Probably, as in the previous quotation, it stands for the Long Walls taken in their entirety; in any case it does not refer to a single wall intermediate between two outer lines.

A third example may be quoted from Plutarch: *τὴν τε Νισαίαν ἐτείχισε (Φωκίων) καὶ διὰ μέσου σκέλη δύο πρὸς τὸ ἐπίγειον ἀπὸ τοῦ ἁστέος ἐπέβαλε.*¹³ The term 'σκέλη' obviously denotes a pair of walls, and the rest of the sentence says in so many words that the *termini intra quos* were the harbour and city (of Megara, in this case).

There can be no doubt, then, that Harpocration was wrong in his explanation of the words 'διὰ μέσου τείχος.' But this is not the only point on which his authority can be impugned. The words which he quotes from



(After E. A. Soudan, *Antiquities of Athens*)

Aristophanes 'τρίων ὄντων τειχῶν ἐν τῇ Ἀττικῇ' by no means suffice to prove the existence of three Long Walls, for it is not at all clear that the reference is to the Long Walls rather than to any other walls in Attica which might be considered as a trio.¹⁴ And again, Harpocration's own words 'διὰ μέσου ἐλέγγο τὸ νότιον' contain an obvious confusion. A glance at the map will show that if and so long as three walls existed, the epithet 'νότιον' must have belonged not to the Middle but to the Phaleric line. It is, of course, possible that after the demolition of the Phaleric wall the 'Middle' wall should have usurped the name of Southern, but this could only be by virtue of its ceasing to be a 'middle' wall. If Harpocration could equate

¹² Leake (p. 131, n. 4) supposes that the scholiast implied a single wall connecting Piræus and Phalerum. But the phrase 'τὸ μέσον . . . τὰ δὲ' clearly implies two distinct

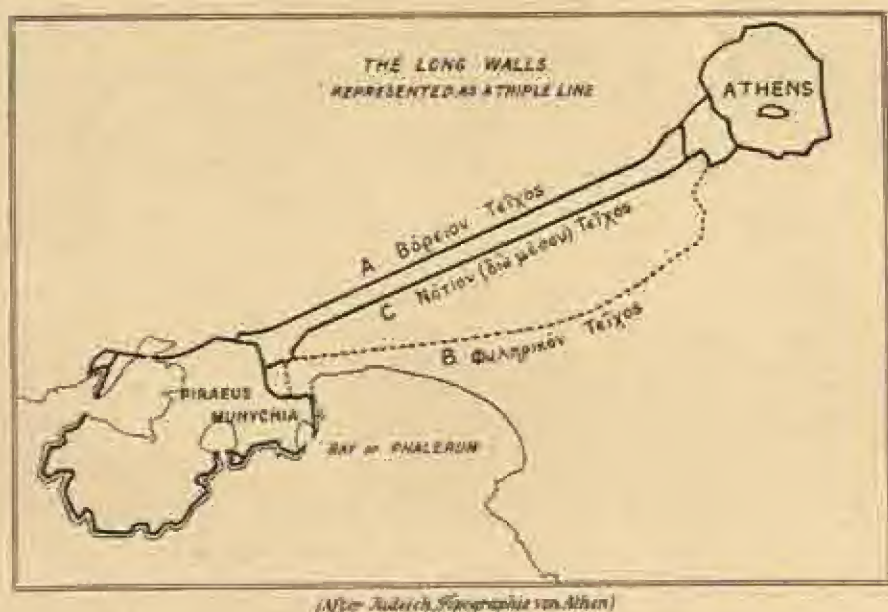
walls.

¹³ Plutarch, *eb.* 15.

¹⁴ Gutschow, p. 69, n. 2.

'middle' and 'southern' as if the two had at all times been convertible terms, it is plain that the true history of the Long Walls was not properly understood by him. Altogether, Harpocration's statement as to the Long Walls cannot be regarded as authoritative.

There remains the passage in Thucydides. The key words here are *'μακρὰ τείχη'*, where the plural form is usually taken to imply two walls. This inference is not conclusive, for a good many Greek authors,¹⁶ including Thucydides himself,¹⁷ use *'τείχη'* to designate a single wall. In the present case the plural form could be applied all the more readily to a single wall if we suppose that the wall had a double face, so that it might be regarded as a couple of walls set back to back.¹⁸



So far, then, Thucydides' language is ambiguous. But in an adjacent passage he supplies us with a crux. In the sentence previous to the one quoted above we read *ἔστι δὲ αὐτοῦ* (of the ring wall of Athens) *ὁ ἀφύλακτος ἦν, τὸ μεταξὺ τοῦ τε μακροῦ (τείχους) καὶ τοῦ Φαληρικοῦ*. In this context the words *'τοῦ μακροῦ τείχους'* can have but one significance. They cannot be taken to stand for the Long Walls as a whole, for the Phaleric wall, which was an integral part of the system, is mentioned as

¹⁶ Numerous instances are given in Steph. *ant.*, s.v.

¹⁷ III. 20: *περιέδρασαν τὰ τείχη τῶν πολέων*. This refers to the single line of walls built by the Peloponnesians round Plataea. Cf. also our expression 'the Walls' (not 'Wall') of Chester, York, Jericho, etc.

The use of the plural form in all these cases

shows that it is quite natural to think of a wall as an aggregate of its sections.

¹⁸ On this point see Gardner, p. 70, and n. 22 below.

The investment wall of the Peloponnesians at Plataea, referred to in the previous note, was likewise built with two faces.

distinct and separate from the *μακρὰν τεῖχος*. Nor again can they be made to refer to the Northern and Middle walls regarded as an individual entity. If any two walls out of three could be selected as the Long Walls *par excellence*, the choice must necessarily fall on the Northern and Phaleric walls, for these were *ex hypothesi* the original pair, whereas the Middle wall was a mere afterthought. It follows, therefore, that the *μακρὰν τεῖχος* was a single wall, viz. the Northern one, and that Thucydides only mentions this and the Phaleric wall, i.e. two walls in all.

So much, then, for the texts which are usually quoted in the discussion of the present problem. In addition to these account should be taken of a passage in Andocides,¹⁹ which relates the construction of the Long Walls section by section, and in so doing makes mention of two lines only, a 'northern' and a 'southern' one. The relevance of this passage to the question at issue is not usually admitted, because the speech in which it is contained was not delivered until 392-1 B.C., and the orator is supposed to be referring to those walls only which were extant at the time of his speaking. No conclusion, it is argued, can be drawn in this case as to the total number of the walls as they stood in the days of Pericles. But this explanation of Andocides' words is unsatisfactory. As the whole of the surrounding context shows, the purpose of the orator in mentioning the Long Walls was to illustrate by them the prosperity of the times at which they were built. With this object in view Andocides had every reason to make the most of the Walls, or even to exaggerate the scale on which they were built. If therefore only two walls are mentioned by him, it is a fairly safe inference that he only knew of two. And this is as much as saying that there were only two, for Andocides himself and many of his audience must have seen the Walls as they stood at the outset of the Peloponnesian War, when all the lines were certainly still in good repair, and it is impossible that he should have made a mistake as to their original number.

A closer inspection of the evidence thus tends to show that the Long Walls from beginning to end were only two in number. The Middle wall never existed: there were only a Northern and a Southern or Phaleric line.

If the above reasoning is accepted as correct, a new problem arises. From the previously quoted passage of Andocides, as also from other texts,²⁰ it appears that the Long Walls were not completed simultaneously, but that the Southern wall remained unfinished for some considerable time after the rest of the work had been accomplished. Now if there had been three walls

¹⁹ *De Pace* §§ 5-7: *ἐπεὶ μὲν οἱ τοὶ Περικλῆος οἶκον ἐκτίσαντες ἐν ταύτῃ τῇ χώρῃ, οὐκ ἐν τῇ μακρῇ τεῖχῃ τῇ βίαιᾳ . . . περὶ δὲ ταύτῃ . . . τὰ τεῖχος τὸ μακρὸν τὸ βίαιον ἐκτίσαντες.*

This passage is repeated verbatim in *Amphict.*, *De Fide Legationum*, §§ 172-4.

²⁰ See Plutarch, *De Gloria Atheniensium*, § p. 351, where it is mentioned that a delay took place in the completion of the walls.

The above-quoted passage from Thucydides

points to the same conclusion. If the term 'Long Wall' (or 'Walls') could be specially appropriated by him for the Northern as against the Phaleric wall, it may be inferred that the two walls were not built simultaneously, but that the Northern wall came first.

The chronology of Andocides is confused in its details, but he is perfectly explicit about the Long Walls being built in successive stages.

all told, a delay in erecting one of these would have been a matter of no great importance, for the remaining two lines would provide a fairly complete set of defences in themselves. But if there never were more than two walls it follows that one of them (the Northern wall) stood in isolation for a term of years. And this at first sight appears absurd, for a single wall extending through some five miles of open and undefended country would be liable to attack on both sides at once, and thus would seem to be quite untenable until the companion *σκέλος* was completed so as to secure its rear.

It must be remembered, however, that at the time when the Long Walls were built Greek siegecraft was still in its infancy, and artillery in particular was conspicuous by its inefficiency or total absence.²¹ Under these conditions a fore-and-aft attack would not necessarily be more formidable than an ordinary frontal assault, and a single stout wall with a double face²² might after all be quite strong enough for its purpose. It should further be borne in mind that the cost of a Long Wall was considerable,²³ and that at the time when these fortifications were being carried out the Athenians were also spending, not to say squandering, money on the Acropolis and other sites. It thus becomes more easy to understand that they should not have pressed the work on the Long Walls to a speedy completion, but should have made shift for a while with a single *σκέλος*.²⁴

At the same time there can be no doubt that a pendant to the North wall formed part of the original scheme of fortifications²⁵ and the construction of the second *σκέλος* was not abrogated but merely adjourned. The eventual completion of the Southern wall is referred by Andocides²⁶ to the period following upon the Second Peloponnesian War and the Thirty Years' Peace (445 B.C.), and it may well be brought into causal connexion with these events. Previous to the campaigns of 447-6 B.C. the Athenians still had confidence in their land army, and in 457 B.C. they defended Attica by invading Boeotia. At this time, therefore, the Long Walls were not the one and only link between town and harbour, and there was no urgent necessity for a double line of fortifications. But in the ensuing war the Athenian field force turned out to be sadly inefficient, and Attica was left without defence

²¹ Witness the disastrous failure of the Peloponnesian League in its attempt to storm the tiny town of Plataea (Thuc. ii. 75 sqq.).

²² If we accept the view that beside the Phaleric wall there was only one other, we must also hold that this second wall was double-fronted. See Thuc. *loc. cit.* *καὶ δὲ παρὰ τοῖς τοῖς τοῖς Πειραιῶς* (i.e. on the present hypothesis, the Northern wall) *καὶ τὰ ἐξωτὴν ἀπὸ τοῦ Πειραιῶς*. These words imply the existence of an inner as well as an outer face.

²³ In addition to the masonry of the wall the laying of the foundations was an expensive business. It required a special act of generosity on the part of Cimon to fill in the marshy tracts between Athens and the seaboard.

(Plutarch, *Cimon*, ch. 13.)

²⁴ A further argument might be drawn from Thucydides' description of the Athenian attack upon the Long Walls of Megara in 424 B.C. (iv. 66-9). In this account we read of one wall only being carried by the Athenians, and of one wall serving as an abutment for the lines of circumvallation drawn round the harbour of Megara. But it is conceivable, though not probable, that Thucydides should have used *τείχεα* in the singular form to denote a pair of walls.

²⁵ Thuc. i. 101, 1: *ἡγοῦντο δὲ κατὰ τοὺς χρόνους τούτους* (458 B.C.) *καὶ τὰ παρὰ τοῖς τοῖς καὶ τὰ ἐξωτὴν ἀπὸ τοῦ Πειραιῶς*.

²⁶ *De Pace*, §§ 5, 6.

against invasion. Henceforth it was clear that in the event of a new Peloponnesian War the countryside would have to be abandoned completely, and that the Athenians must put all their trust in stone. Under these conditions it was of course wise to make assurance doubly sure, and it is no matter for wonder that the second line of walls should now have been taken seriously in hand.²² But once the second wall had been completed, the connexion between Athens and Piræus was, humanly speaking, impregnable; and as has been argued above, there is no sufficient reason to suppose that the number of walls was ever raised to three.

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²² It might also be suggested that by building a second wall at some little distance from the first the Athenians also intended to provide a protected camping ground for refugees from the countryside, for which purpose the intermediate area between the two walls would have served admirably. But Thucydides, who records that the homeless folk squatted on

every open space and on the Long Walls themselves, does not mention any settlements in between the Walls (ii. 17, 3).

In favour of such settlements Leake quotes Xénophon, *Hellenica* ii. 2, 3: *ἀπὸ τῆς ἐν τοῖς Πειραιῶσι καὶ τῶν παρὰ τοὺς εἰς ἄκρην ἀπὸ τοῦ*. But these words prove nothing.

THE ANCIENT PLOUGH.

[PLATES XVII.—XX.]

THE construction and the development of the plough in Greece and Italy in ancient times is not a subject of general interest either to scholars or to archaeologists. It is, however, one which presents itself from time to time to students of Hesiod and of Virgil, and, since the obvious works of reference give but meagre aid to the enquirer,¹ I have attempted to supply here a fuller account than is to be found elsewhere both of the literary and of the monumental evidence, in the hope that a more detailed discussion may not be without its uses.

I propose in the first part of this paper to discuss and give a rough classification of the types of ancient plough which are represented on the monuments. In the second and third parts of the paper I shall attempt to sift the considerable number of ancient authorities who deal with the subject and to supply some comments suggested by the monumental evidence. The authorities, even when not directly concerned with Hesiod and Virgil, fall conveniently into line with the ancient commentators on those poets, and I shall deal first with Hesiod and then, more briefly, with Virgil.

I.—The Monumental Evidence.

Before we turn to the monuments themselves a word or two of preface is necessary. The distinctions which I shall draw between various forms of plough are designed to assist in the elucidation of the literary evidence, and I have therefore emphasised some features which from other points of view might seem of slight importance. Further, in discussing the first three

¹ The most important article is Siglio's (in Dürerberg and Siglio's *Dict. Ant.* s.v. *arctron*) but it is very inadequately illustrated. Some additional illustrations are supplied by Haunsfelder's article (s.v. *Arctron*) and by Dr. S. Müller's interesting paper *Joug, Charrue et Mouton* (*Mém. Soc. Roy. d'Hist. de Nord*, 1902). The plough shown in Fig. 5 was reproduced in connexion with Hesiod by O. Lagercrantz in *Compt. Rend. de l'Acad. des Inscriptions*, pp. 190 ff., and the three vases (Figs. 1, 3, 9), by O. Jahn in *Berichte d. Sachs. Ges. d. Wiss.* 1867, pp. 74 ff. I have reproduced in this paper all the important monuments figured in these articles and I have added a good many more. The earlier discussions by Ginzert (*Wagen u. Fackwerke d. Griech. u. Röm.* vol. I.) and Menger (*Mém. de l'Inst.* 1815, pp. 610 ff.) have proved of little service.

R. H. Rau's *Geschichte d. Pfluges* (Haidelberg, 1843) I have not seen, but the figures reproduced by Maitren (*Siedelung u. Agrarwesen*, I. p. 273) do not inspire confidence. H. Behlen's *Der Pflug u. das Pflügen* (Tübingen, 1904) contains a useful summary of the Latin literary evidence but is more concerned with ploughing than with ploughs.

I am indebted for kind assistance in procuring illustrations to Dr. Zahn of the Berlin Museum, Prof. Neef of the Altertumsmuseum in Mainz, Prof. Cellini of the Musei di Villa Papa Giulio in Rome, Dr. Gail of the Florence Museum, M. Léon Dorez of the Bibliothèque Nationale, M. E. Babelus of the Cabinet des Médailles, Dr. Hlaskenberg of Copenhagen and, in the British Museum, to the Keepers of the Greek and Roman Antiquities, the Coins, the British and Mediaeval Antiquities, and the Manuscripts.

classes of plough which I distinguish, I have not dealt with the evidence in strictly chronological order. Since, however, these three classes do also represent evolutionary stages, it is necessary to remark that we cannot expect monuments representing more primitive forms of plough always to be earlier than those which represent more advanced forms. In agricultural communities civilisation does not advance with even strides, and a rustic, either from a natural conservatism or from poverty, often continues to employ a form of implement which has long been discarded by his more progressive or wealthier neighbours. We need not, therefore, hesitate to classify a form of plough as primitive because examples of it are found in use side by side with more elaborate types. The monumental evidence will not allow us to say that at a given date such and such a form of plough was universally employed, but it will indicate broadly the type of plough in use at different periods, and it will enable us to date roughly the introduction of new types.

Secondly, in discussing the evidence I propose to deal with the Greek and Roman monuments together.² The forms of plough in use in the two countries in early times are so similar that the monuments can be conveniently considered as a whole, and it will be sufficient to point out in passing such characteristics as appear to be peculiar to one or other nation. I propose, further, to omit from discussion the primitive implements from which the plough itself developed,³ and to take up the story when it is already a real plough and consists of three essential parts—the stock which breaks the ground, the tail by which the ploughman directs the plough and presses the stock into the ground, and the pole to which the draught-animals are attached.

The rudest form of plough, then, consists of a piece of wood so shaped by nature that it possesses all these essential parts and needs but little shaping or trimming to fit it to the farmer's purpose. That such ploughs were occasionally in use is quite possible, though I have found no clear example on the monuments, and it will be convenient to class as Form I all ploughs in which the main timbers are of one piece.⁴ It is probable that such ploughs were never common, and that they varied considerably in shape. The shape is dictated by the piece of wood, and, within certain limits, considerable variety is possible; but suitable timbers can seldom have come in the farmer's way, and we may regard our hypothetical Form I as an occasional variant of the form we are to consider next.

I shall class as Form II. such ploughs as have stock and pole in one piece, but the tail inserted artificially.⁵ And here it is to be noted

² I shall say nothing in this paper of the Egyptian plough which differs considerably from the Greek and Roman. A paper on the subject by H. Schäfer will be found in *A.S.A.* x. 197 ff. See further Reinsh. *Ag. u. Egypt.* *Leben im Alt.* p. 569.

³ Some remarks on this subject by E. B. Tylor will be found in *J. Anthr. Inst.* 1881, pp. 74 ff.

⁴ Saglio reproduces from some other source a gem reputed to be in Florence which shows a plough apparently of this form. The drawing is unconvincing and as I learn on enquiry that this gem is not now in the Florentine collection I have not figured it.

⁵ It should be said at the outset that it is not always easy to decide from the representations of how many pieces a plough is com-

that though one piece of wood combining all three members would naturally be rare, any tree with a branch curving sharply upwards would provide material for ploughs of Form II., and this type of implement is clearly discernible on the monuments. It occurs, for example, on a h-f. cup in the Louvre (Fig. 1), on two gems of Hellenistic or Roman date (Pl. XVII. 1 and 2),⁶ and on a coin of the Thracian Chersonese (Pl. XVII. 5). A fourth gem shows a man fashioning what appears to be a plough of this kind (Pl. XVII. 3).⁷

From Italy I have found no examples of ploughs of precisely this type,⁸ though the subsequent development of the plough in that country makes it pretty certain that they must have existed. We have, however, some specimens of a variant of Form II. in which the tail is inserted, not in the stock but in the pole, in front of the angle formed by the juncture of pole and



FIG. 1.—PLOUGHS FROM A BLACK-FIGURE CUP IN THE LOUVRE.

stock: The best known example of this type is the bronze group from Arezzo, now in the Villa Giulia, in which the plough is armed with a kind of metal shoe secured to the stock by two bands (Pl. XVIII.). In this specimen, however, the stock is inclined to the ground at a sharp angle (a peculiarity we shall have to notice in some other Italian ploughs), and the relationship to the Greek type is thereby obscured. It is more apparent in the two following examples, where the stock is parallel to the ground as in the Greek

posed. I have classified them to the best of my ability, but ploughs of Forms II. and III. are so numerous that the transference of one or two examples from one class to the other is of no consequence, and I shall not stop to argue individual cases.

⁶ Beclia 6193, 6603; a third is Furtwängler, *Ant. Comm.* xxix. 52 (present owner unknown).

⁷ B. M. 187; a similar design Furtwängler

Ant. Comm. xv. 62. An actual example of a plough of this form exists. It was found at Papen in Prussia and is now in the museum at Thorn. The tail, which is missing, was inserted in a hole in the stock. See *Beckerf. J. Bild.* 1903, p. 716, Roops, *Waldhäuser u. Kulturschätze*, p. 502.

⁸ Unless one or more of the gems figured in Pl. XVII. be Roman.

specimens already discussed. Fig. 2 shows a plough from a Roman bronze plaque in Copenhagen,* Pl. XVII. 6 a medallion of Commodus. In this example the tail is inserted further from the angle of pole and stock; and the projection of those two timbers behind the tail serves as a foot-rest whereby the ploughman can press the stock into the ground.



FIG. 2.—PLOW
FROM A ROMAN
BRONZE PLAQUE
IN COPENHAGEN.

From these two examples it is clear that the weapon wielded by a hero on a certain type of Etruscan cinerary cist (Pl. XIX. 2)¹⁰ is a plough of this pattern minus the tail.

The next step in complexity made by the plough is when all the three main members are separate timbers artificially joined, and I shall class ploughs of this kind as Form III. This



FIG. 3.—INTERIOR OF A CUP BY NICOSTHENES.

type may be illustrated from a b-f. cup signed by Nicosthenes, now in

* The whole plaque is figured in Blüchsenberg *Arch. Stud.* T. II.; A. B. Cook, *Zeus*, Pl. XXVII.

¹⁰ It is one of the two commonest types of Etruscan terracotta cists and specimens are very

numerous. In the Museum at Florence alone are 54 (30-41 and two unnumbered from Chiusi). I have noticed others in the Falson Collection at Oxford (7 specimens), Villa

Berlin (Fig. 3)¹¹ and from a late coin of Centuripae (Pl. XVII, 7). I select these examples because they show very clearly the wooden peg by which the pole is attached to the stock. On the Berlin cup we may notice that the pole has an additional piece of wood lashed to it to increase its length, and this seems also to be the case in the plough of Furin II. figured above (Fig. 1: cf. Pl. XVII, 2). There is also some form of share added to the stock.

The very much more elaborate example of Form III. reproduced in Fig. 4 is said by Ginzert to be from a relief on the pedestal of a colossal statue of Demeter on the 'island of Magnesia.' It is fitted with a curved tail, a large metal share, and earth boards, and the pole, which is apparently in one piece, is supported by a wooden stay.¹²

It will be observed that in the two examples of Form III. which I selected as typical, tail and pole are separated by a wide space, and this is also true of our earliest example of Form II. (Fig. 1). This space varies

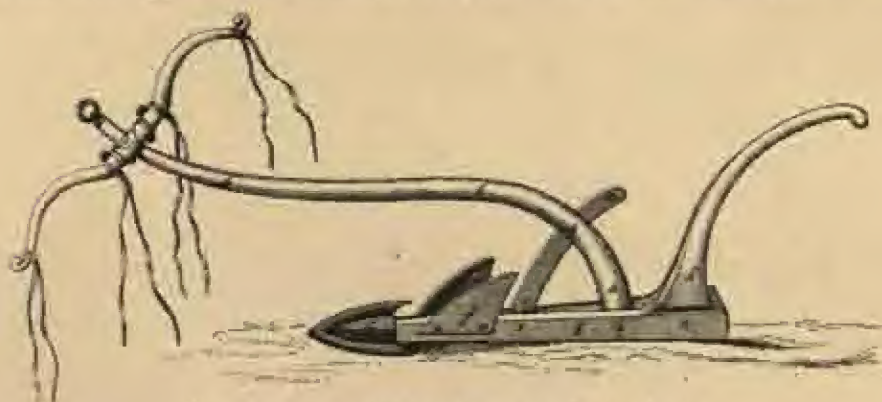


FIG. 4.—PLOW FROM A RELIEF (AFTER GINZERT).

considerably even in early specimens, as may be seen from Fig. 5 and Pl. XIX, 1, which represent an early terracotta group from Tanagra now in the Louvre,¹³ and a bronze from Cyprus in the British Museum.¹⁴ The coin

(Gallis (4: 2986-2987), Bologna, and British Museum (it each: B.M. D. 792-794). Others are in the Vatican, at Modena, Milan, Paris, Copenhagen, Oxford. The finest specimen I have seen is Villa Gallia 3980: the example figured is B.M. 5793. The subject is unknown. There seems no reason to suppose the warrior to be Echelona, especially as the *tydraz* is the one part missing from the plough he wields. Ploughs of similar type occur on the Petroses gold plate (*Arch. Zeit.* 1872, T. 52).

¹¹ Besides this and the Louvre cup, there is a third b. c. cup with ploughing scenes in the British Museum, Room of G. and E. Life 500. A fourth, in Florence, has on each side a group of men carrying what is thought to be a symbolical phallus-plough (Dieterich, *Mitthe-*

ilte, pp. 167 f.). This interpretation, though it is not free from difficulty, seems probable.

¹² This example is suspect and rests solely on Ginzert's authority. The drawing was given to him by one Ganes archimandrite of the Greek church in Vienna, a native of Mellae which is also on the 'island of Magnesia.' I learn from Mr. A. J. B. Wace that Mellae is on Mt. Pelion, so Ginzert is doubtless means the Thessalian district of Magnesia. There is nothing antecedently improbable in this plough and I see no reason to exclude it from the discussion, though the drawing is probably not reliable for details.

¹³ *B.C.H.* xxvii. Pl. I.

¹⁴ B.M. 182, B.M. 180 is an almost identical group of unknown provenance. Why one of

of Centuripae is somewhat exceptional, for in later examples the space is usually reduced.¹² This may be seen in the plough held by Demeter on a r.-f. crater from Cumae in the Cabinet des Médailles¹³ (Fig. 6), which shows also elaborate bindings on stock and pole, and in the ploughs which appear as symbols on the coinage of Corinth in the fourth century, and on some coins of Alexander the Great (Pl. XVII S. 9). On a second century coin of Emma (Pl. XVII 10); as on a fourth Hellenistic gem (Pl. XVII 4),¹⁴ the intervening space has disappeared. In all these examples, however, it will be noticed that pole and stock remain much more massive than the tail. The separation of pole and tail by a space such as we find on b.-f. vases seems to be peculiar to Greek-speaking countries: at least I have found no example from Italy.



FIG. 5.—TERRACOTTA GROUP FROM TANAGRA.

This is perhaps the most convenient place to mention a remarkable bronze votive plough from Talamone, now in the Museum at Florence (Pl. XX. iii), which falls by definition into our third class, though it differs markedly from the specimens we have been discussing. The pole is straight, and from its hinder end rises the tail. The stock is a massive piece of wood apparently fastened below the pole by a bolt which pierces the pole just in front of its juncture with the tail. This plough is clearly a development of the Italian variety of Form II which we have already discussed. Pole and stock are no longer one piece of wood, and to secure solidity at the join

the eyes in these groups should be reversed it is difficult to see. Muller figures a similar group in Copenhagen, but without showing the position of the eyes.

¹² On late coins the nearest to II are the ploughs of Iacinti and Coscora (Hill, *Coin of Sicily*, Pl. XIV. 15, R.M. Cat. *Græc.*, Pl. VI. 13).

¹³ Ploughs are very rare on r.-f. vases; the only other example known to me is on a Boeotian vase with Triptolemos now in Berlin (Indenbühl, *Stren. Beitr.*, T. vii.).

¹⁴ R.M. 2058. On a coin of Pella of Imperial times the tail rises from a small projection at the heel of the stock; Indenbühl-Müller *Monn. Græc.*, p. 87.

the plough has become much more massive at this point; the general shape, however, remains the same.



FIG. 6.—CHRYSE FROM CUMÆ.

This plough stands to the Italian variety of Form II. as the common Form III. to the common Form II. The Talmone plough is, however,



FIG. 7.—PLOUGHING SCENE FROM AN ETRUSCAN BRONZE SITULA.

unique, and Italy supplies examples of Form III. indistinguishable from the Greek specimens we have already considered. Fig. 7 shows a plough from a well-known bronze situla in Bologna. The form of this

plough calls for no remark, as it closely resembles the Greek examples.¹⁹ It is perhaps worth remarking, however, that it must be very light, since the ploughman can carry it on his shoulder.²⁰

From this type, common to Greece and Etruria, the common Roman plough of the first century B.C. differs little. Four good examples are supplied by the coins of C. Vibius Pansa, Q. Scipio, Ti. Gracchus²¹ and Julius Caesar (Pl. XVII. 11-14), which range in date from about B.C. 50 to B.C. 29. Here pole and tail rise together from the hinder part of the stock, stock and pole have lost the exaggerated solidity seen in the earlier examples, the stock is considerably reduced in size, and the pole, not the stock, is now the most conspicuous member in the implement. This form, as typified by the coins, I shall call Form IV.; it is in essentials a refined variety of Form III.

Three coins of Marins (Pl. XVII. 15-17) show a kind of plough which may be regarded as a variant of this type. Here pole and tail meet at an acute angle, as in the normal form, but the stock, instead of standing out at right angles from the tail, projects downwards in a line only slightly inclined to it.²² These three examples remind one of the Arezzo bronze, and the occasional substitution of a vertical or inclined stock for the horizontal stock of Greek ploughs seems peculiar to Italy,²³ though it has some analogies with the peculiar plough which appears on the coins of Obulco in Baetica (Pl. XVII. 18). This, however, seems to be a primitive Spanish type with which we need not further concern ourselves, as it does not occur elsewhere.²⁴

For the first century B.C. we thus have a good deal of evidence, and we may fairly conclude that Form IV. was then the commonest type of plough. From this point on, however, the evidence becomes extremely scanty, and even when ploughing scenes occur on coins, the execution is so rough that it is often difficult to distinguish any details of value for our purpose.²⁵

¹⁹ The Greek specimens are remarkably uniform in type. Since this paper was in print however my attention has been called by Miss R. Redford to a variant represented by a terracotta in the museum at Naples, said to come from Tanagra. I have not seen the specimen and have not full information about it. It is apparently without a pole and is dragged by larvae (as is the modern Maltese plough). The oxen have on their backs a kind of secondary yoke attached to the neck-yoke by a cross-piece. The stock is also peculiar and seems to resemble somewhat that of the plough shown in Fig. 8. It is to be hoped that this example may be published.

²⁰ *Fann. Horum, Urganst. d. Aith. Kunst Taf. xcix.* The drawing provokes, by way of contrast, citation of Virg. *Ecl. II. 88* *ut ipso vultu lupo referant sanguine luvum*, *Hor. Epod. II. 88* *feces domuum luvumque domus collo trahentes languida*, *Persius (l. 75)* *lucis vultu domum hunc tulit*, but is perhaps not to be taken literally.

²¹ This example has the upward direction of the pole exaggerated as on the Sologan aitali.

²² Cf. the plough which appears as a symbol on the coins of L. Pius (*Rebulet. Mon. d. l. Rep. Rom. I. p. 293, 164*).

²³ Cato (*R.R. cxiiv*) distinguishes *aratro comenico* and *compenico* as suitable respectively for heavy and light soil. It is conceivable that this distinction may refer to the two types shown on the monuments, but *Goggin* (l. 1. 9, 11. 8) suggest that it is a difference of weight and size.

²⁴ It is not unlike certain primitive ploughs of Scandinavian countries; *S. Müller, op. cit.* pp. 21, 30.

²⁵ For example, on the coins of Issindus, Ninus, Berytus, and Sidon (*B.M. Cat. Lycania*, p. 5, n. 107; p. 117, n. 9; *Phoenicia*, p. 58, n. 51; p. 185, n. 301). These seem to be of Form IV. Ploughs appear also on Roman coins of Dyms (I) (*Linköf-Banner Mon. Över.* p. 186, 42) and Parium (*ib.* p. 251, 124, p. 252, 131) but of these I have

Further, since the evidence, such as there is, has to be gathered from various parts of the Roman Empire, some of the ploughs may be local varieties. The general type, however, remains much the same, and I have included all the examples I have been able to find; they are not numerous enough to allow of local distinctions being drawn.

A coin of Ptolemais issued under Nero (Pl. XVII. 20) shows Form IV, persisting in the first century A.D. and one of Tyre issued under Septimius Severus (Pl. XVII. 19)²⁶ carries it into the second. A still later example is to be found on an incised Christian tombstone in the Lateran.²⁷ A Roman bronze group found in England, and now in the British Museum (Fig. 8), shows a plough differing little from these examples except that the pole is straight and the small stock has the downward projection already noticed in some earlier Italian examples.²⁷ A coin of Alexandria issued under Antoninus Pius (Pl. XVII. 21) is indistinct, but seems to show a variety of this form in



FIG. 8.—BRONZE GROUP FOUND IN DERMAM.

which the pole curves round to meet the line of the stock, and the tail rises from the pole at a point considerably above the stock. In general shape we may compare it with the three Marian coins already discussed. A further

not seen specimen. A Pompeian fresco published in *Mos. Arch.* v. 49 contains an object which may be a plough but the drawing is unintelligible and presumably inaccurate.

²⁶ If the line which projects diagonally backward from the share be meant to be part of this plough it is difficult to explain. Varro *R.R.* i. 29. 2: *tertio cum aratro luto semine hinc luto dicuntur, id est cum tabellis additis ad unumquemque et satum frumentum operantur in pennis et subant fossas quo pluvia aqua delabatur*, cf. Plin. *N.H.* xviii. 49. 3; Pallad. i. 14. 1: a somewhat similar projection

occurs on a plough in a late mosaic at Reading: *Trans. R.I.B.A.*, 1886-7, p. 123 f.

²⁷ Latreux, *Mos. Christ.* xiv. 7. Small photograph in Marzocchi, *Mos. Mus. Christ. Lateran.* tav. lvii.

²⁸ The projections on the sides of the tail cannot be earth-boards as they point forward. Possibly they are *houe-rests* to assist the ploughman in throwing his weight on to the share. A very similar plough (but without these projections) appears on a Roman sepulchral relief figured by Spon, *Mus. Ital.* p. 308, but I have been unable to trace the monument.

variety occurs on a late relief from Arlon, now in Luxemburg (Fig. 9),³⁸ where the tail is curved backwards and the three main beams unite at a central point in a manner not clearly to be distinguished in the relief. With this



FIG. 9.—RELIEF FROM ARLOS.

example we may compare a curious bronze model of a plough with backward sloping tail and broad earthboards which was found at Cologne and is now in the Altertumsmuseum at Mainz (Pl. XX, 1-2).



FIG. 10.—MODERN GREEK PLOUGH.

With this our survey of the monuments of classical antiquity closes. The ploughs in use in the countryside of Greece and Italy at the present day, though they differ a good deal in detail, belong fundamentally to the

³⁸ From *First History of Art*, Pl. LXIV, 1. Unable to obtain a photograph of the relief I have not seen this example and have been

some type as was in use in ancient times. I figure here two characteristic examples (Figs. 10 and 11).²⁰ How far the continuity of the ancient and modern types can be traced through the monuments of the middle ages I cannot tell, but since the authorities with whom we shall have presently to deal, belong in part to a later epoch than any of the monumental examples discussed hitherto, I have thought it worth while to give a few examples from early manuscripts.²¹ In the manuscripts, so far as I have been able to ascertain, only one essentially new type appears, and that, though it does not happen to be represented on earlier monuments, can be shown to descend from antiquity.

In a MS. of Rabanus Maurus dated 1023 are two examples, of which one is here reproduced (Fig. 12).²² The plough closely resembles the earlier examples except for the fact that the pole has now an angular joint



FIG. 11.—MODERN ITALIAN PLOUGH.

instead of a curve.²³ It shows a tendency to revert from Form IV. to Form III. In the other example in this MS.²⁴ the pole is a straight timber springing directly from the upper part of the tail.

In these examples the tail is straight, but the curved tail of the Arlon relief and Mainz bronze can be paralleled from manuscripts, one of which

²⁰ Fig. 10 is from a photograph taken at Ayasoluk near Ephesus. The actual example is Turkish rather than Greek, but I select it in preference to similar Greek specimens since the photograph shows the details unusually clearly. For the photograph reproduced in Fig. 11 I am indebted to the kindness of Dr. Ashby. It shows the plough suspended from the yoke for carriage, as described by Virgil, *Georg.* ii. 66. This specimen has the perpendicular tail of the ancient plough.

²¹ I am indebted to Dr. M. R. James for H.S.—VOL. XXXIV.

information with regard to some of the MSS. mentioned below.

²² Montcastrino, 132 f. 10.

²³ The curve survives in *God. Paris*, type 582, f. 84 (fifteenth century), where the plough has a large share and the pole is nailed to the tail by a cross-bar. This example is not unlike the two ploughs in the Galle Hebed (*anc. xiii. xiv*) though these have a straight pole which springs from the tail.

²⁴ F. 19.

is here reproduced (Fig. 13).²³ Here the pole is straight and fastened to the base of a curved tail; the plough may be compared with the Roman bronze shown in Fig. 8.



FIG. 12.—Plough from *Cod. Vindob.* 152.

Another form of plough which appears in early MSS. has a straight pole which runs parallel to the ground and is supported on wheels. I reproduce



FIG. 13.—Plough from *Cod. Harl.* 603.

an unusually clear drawing from a Latin manuscript in the Bibliothèque Nationale (Fig. 14).²⁴ With the details of this plough we need not concern

²³ B.M., *Cod. Harl.* 603, f. 51; similar designs on ff. 24 and 66. The implement shown on f. 21:1 do not understand, though something similar appears on some Egyptian monuments. This MS. is English twelfth cent.

but the miniatures are copied from the ninth cent. French Rheims Psalter now at Utrecht.

²⁴ Paris, Lat. 15572 (twelfth cent.; probably northern French) f. 2. Earlier examples, differing in some particulars, in the British

ourselves, and I need only remark that the addition of wheels to the plough dates from Roman times, though I have not found any early examples of the type.²⁰ The elder Pliny²¹ states that the invention was recent and came from Rhaetia.

Here we may close our discussion of the archaeological evidence. The monuments supplied by the first twelve centuries of our era are not numerous, but they seem to indicate that the type of plough which I have called Form IV, survived throughout a lengthy period without fundamental modification. The most striking changes in its general shape are the appearance of the curved tail and the straight pole. The addition of wheels is possibly connected with these changes. At any rate the wheeled plough which appears in the miniatures, in spite of its elaboration, is separated by no very



FIG. 14.—Plough from *Col. Pavu. Lat. 13673*.

broad gulf from the simple implement seen on the coins of the Roman Republic.

There are, finally, two points which will not concern us in the subsequent portions of this paper, but may conveniently be touched on here, since they concern students of Hesiod.

First as to the implement carried by the ploughman. The *vicula* on the British Museum gem (Pl. XVII 4) has a whip, so has the ploughman on

Museum: Cotton Tib. B, v. 1, 3, Jul. A, 11, 12, both eleventh century Anglo-Saxon. The lower margin of the Bayeux tapestry shows a similar plough with the ploughman seated between the wheels.

²⁰ Saglio (Fig. 133) reproduces from Caylus,

Enc. v., Pl. LXXXII, an amulet which has on it a wheeled plough, but the antiquity of this piece seems to me so doubtful that I have not thought it worth while to figure it.

²¹ *N.H.* xviii. 173 (see p. 279); cf. Servius ad *Virg. Georg.* i. 172 quoted below.

the Louvre vase (Fig. 1), the Bologna stula (Fig. 7) and on Caesar's coin (Pl. XVII. 14). In Figs. 12 and 13 he has a goad.³⁸ In the other examples the implement seems to be merely a stick for stimulating the draught-animals, and such I take Hesiod's *ἄρπηξ* to be. Reins or guide-ropes are not mentioned and they appear only on one gem (Pl. XVII. 4).

Second, as to the draught-animals. Hesiod's are *βοεῖ ἐναετήριω ἄρσενε*, and the evidence, both literary and monumental, shows conclusively that cattle were far more frequently employed than other animals. One of the ploughs on the Louvre cup (Fig. 1) is drawn by mules, and Homer, though he usually speaks of cattle,³⁹ states in one place that mules are superior.⁴⁰ Theognis⁴¹ also mentions mules in this connexion, and we are told that Zeus himself was the first to yoke them to the plough.⁴² Horses and asses were probably seldom employed; I have noted one reference to each in Greek literature.⁴³

II—Hesiod.

I.

W. D. 427.

εἰλλ' ἐπικουρίῃσιν κἀκεῖ φέρουσ' ἄρ' ὅσον δὲ τοῖς ἀέροι
 ἐν ἄλσος ἀπὸ ἡρώδ' ἐκζητῶνται ἢ κατ' ἀνέμων
 κραιναί· ὅς γὰρ βοῶντιν ἡμῶν ἐκζητούμεν ἄνθρωποι·
 εἴτ' ἢ κατ' ἀθηνῶν ἡμῶν ἐν ἄλσος πᾶσι
 γομφώσιν παλῶσιν τρωμενέμεναι ἐκτακῶν
 βοῶν δὲ θάπτεσθαι ἄνθρωποι, σπονησόμενοι κατὰ πλῆθος,
 αὐτόγυνος καὶ κτηνῶν ὅτις παλὲς ἄνθρωποι αὐτῶν
 εἰ χ' ἴτερος ἦσαν, ἴτερος κ' ἐπὶ βίωσιν βούλων
 δόφους δ' ἢ πετρίδων ἀκούσαντες ἐκτακῶν.
 ἡρώδ' ἐλαμνὸν γῆρας πρίον· βόας δ' ἐναετήριω
 ἄρσενε ἐκτακόμεναι· τῶν γὰρ ἡρώδ' αἶε ἀλασθῶντα.
 ἦδη μέγιστον ἔχοντες· τοῦ ἐργάζεσθαι ἡμῶν.

A.

Elleg. Moysi. p. 173, 16.

ΑΥΤΟΓΥΝΟΣ}. ὅς γὰρ εἴς τε ἀνέμων καὶ τοῖς μετὰ αὐτοῖς πνεύμασι τὸ δὲ αὐτόγυνος καὶ τὸ
 μετὰ τῇ σπορῇ ἐκτακόμεναι ἡμῶν τὸ ἐλαμνὸν καλεῖται κτηνῶν, τὸ δὲ γῆρας πρίον καλεῖται
 τὸ δὲ τῇ σπορῇ ἐκτακόμεναι ἡμῶν τὸ ἐλαμνὸν καλεῖται αὐτόγυνος, τὸ δὲ ΕΛΥΜΑ ἐκτακόμεναι, εἰς δὲ ἡ
 σπορῇ αἶετ' ἐκτακόμεναι καὶ τῶν γῆρας πρίον. ὅ δὲ κραινὴ ἢ ἀνέμων, καλεῖται ΕΚΤΑΚΗ. τὸ δὲ ὅς
 ἐλαμνὸν καλεῖται κτηνῶν ἐκτακόμεναι, εἰς δὲ ἡ ἐκτακόμεναι αὐτῶν, αἶετ' τὸ δὲ ἐκτακόμεναι τὸ ἀπὸ τῶν
 γομφώσιν ἐκτακόμεναι βοῶν, ΕΥΗΕ. τὸ δὲ ἀπὸ τῶν γῆρας εἰς τοὺς ἡμῶν, ΕΥΤΟΒΕΣΤΕ.

Hesiod. *W. D.* 427.

τὸ κατὰ τὴν μέγιστον τὴν ἐκτακόμεναι τὴν ἐκτακόμεναι.

³⁸ So *Anth. Pal.* vi. 41. 101.

³⁹ *S.* 703, v. 22, s. 174.

⁴⁰ *S.* 252.

⁴¹ 1201.

⁴² *Elleg. Moysi.* s. 2, 174.

⁴³ *Soph. Ant.* 341 and *Schol.*, *Lycurgion* 817. Varro (*R.E.* i. 20. 4) states that in Campania, where the soil is light, cows or asses were used for ploughing; cf. *Pliny, N.H.* viii. 43.

Schol. Ap. Rhod. III. 222 *

Αὐτῶντος δὲ φησὶν ἄριστος τρεῖς ἀντιδιαστέλλει τοῦ πηκτός, δύο γὰρ ἀπὸ τῶν εἰδῶν αὐτῶντος καὶ πηκτός. πηκτός μὲν οὗτος ἐστὶ τὸ ἐξ ἀνταβλήτου ἔχει τὸ ἔλασμα. ΕΛΑΣΜΑ δὲ ὅστις, ἐν ᾧ ὁ ὄντις ἐπὶθεῖται τὸ δὲ ἀπὸ τοῦ ἐλαμῶτος ξύλου ἐπὶ τοῖς ξύλοις τῶν κτηνῶν, ΓΥΗΣ καλεῖται. τὸ δὲ ἀπὸ τοῦ γίγν. ΙΣΤΟΒΟΥΕΥΣ. τοιαῦτον μὲν τὸ πηκτός. τοιαῦτον δὲ τὴν κατασκευὴν ἔχοντα σβουγι ἐν τῷ Ἀρχιτεκτονικῷ παραβλεπόμεναι. αὐτῶντος δὲ ὅστις, αὐτῶντος τὸ ἔλασμα οὐκ ἐστὶν ἐν ἀνταβλήτοις.

Pollux, I. 252:

Ἀρίστου μίση. ΕΧΕΤΑΗ τὸ κατασκευὴν ξύλου ὁρθῶς οὐ ἔχειται ὁ ἄριστος. αὐτὸ δὲ ἐν κλάδῳ περὶ καθ' ἑκτὴν χεῖρα ἐπαμφοῖται, χειροκλαδί. ὅπου δ' ἐμπέπηγος ἢ ἐχέτλη, ὀλίγη. ᾧ δὲ ὁ ῥυθμὸς ἐνὶ ῥυθμῷ, ΕΛΑΣΜΑ. τὸ δὲ ὁρῶν ἀνταβλήτου ὄναι, ὅς τὸ ἄριστος ἐν ῥυθμῷ. ὁ δὲ ῥυθμὸς ἔχοντα ἐν τῷδε· τὸ μὲν ἐπικαμῖναι αὐτῷ ᾧ ἐπικαμῖναι ἐν ἔλασμα γεγραμμένον. ΓΥΗΣ· τὸ δὲ μετὰ τὴν γῆν. ΙΣΤΟΒΟΥΕΥΣ· οὐ δὲ τίλλει αὐτὸν τὸ μετὰ τὸν ζυγόν, κόμωλη.

ᾧ δὲ ὁ ῥυθμὸς ζυγῶς MSS. ῥυθμῶς: Vuckianstsch.

Minichowski ad 441

ΓΥΗΣ, τὸ λεγόμενον γυνάτιον τοῦ ἄριστος. ΕΧΕΤΑΗ, τὸ ἐμπέπηγος ξύλου τῷ γῆν. ὁ κατασκευῶν αὐτὸ ἀπὸ τῶν κτηνῶν αὐτῶντος ἔλασμα τὸ ἄριστος. ΕΛΑΣΜΑ, τὸ πρὸς τῷ ῥυθμῷ τῷ γῆν εἰς ὃ ἐμβάλλεται ὁ ὄντις. ΙΣΤΟΒΟΥΕΥΣ, ὅς καὶ ἱστοβὸς λέγεται, τὸ ξύλον τὸ διήκει μέχρι τοῦ ζυγῶς τοῦ ἐπικαμῖναι τοῖς ὄντις τῶν βοῶν καὶ ζευγνύμενος αὐτῶν· ἐμπέπηγος δὲ καὶ οὗτος τῷ γῆν σφραγισθεὶς διὰ τὴν σφραγιστικὴν.

Proclus ad 425

ΦΕΡΕΪΝ ΔΕ ΓΥΗΝ. Περὶ ἄριστος κατασκευῶν ἐν ταῖς διδασκαλίαις, καὶ διὰ αὐτῶν τὴν ὄντις, τί τὸ ἔλασμα, τί ὁ γῆν, τί ὁ ἱστοβὸς, τί ὁ ἐχέτλη, ἐξ ὧν ἐστὶ τὸ ἄριστος. ἡ μὲν οὖν ὄντις ἐστὶ τὸ ἀνταβλήτου αὐτὸ τὸ ἐν τῷ ἄριστος σχίσμα τῆς γῆς τοῦτο δὲ τῷ ἔλασμα περικαμῖναι ὄντις ἐμβάλλεται ἐν αὐτῷ κλάδῳ. τὸ δὲ ΕΛΑΣΜΑ ἐστὶ τὸ ἐμβάλλεται ἐν τῷ τῆς ὄντις ἀπὸ τοῦ ξύλου κατὰ τὸ ἄριστος ὁ καλεῖται ἐχέτλη. ὁ κατὰ θάτερον μέρος τὸ ὄντις ἀνταβλήτου πρὸς τὴν γῆν. ὁ δὲ ΓΥΗΣ ξύλον ἐστὶ μακρὸν ἔχειν ὁ σῶμα τοῦ ἐλαμῶτος ὁρθῶς ἐμπέπηγος ξύλου ἐν αὐτῷ, ὁ ἀπὸ τοῦ ῥυθμῷ αὐτῶντος αὐτῶντος τὸ ἄριστος καὶ διὰ τοῦ ἄριστος τῶν κτηνῶν καὶ τοῦτο τὸ ξύλον καλεῖται ΕΧΕΤΑΗ. τοιαῦτα δὲ τῷ γῆν ἐμπέπηγος ὄντις ξύλου μίσην ἐν τῷ ἄριστος μέρος τὸ ἄριστος τῶν τοῦ ζυγῶς διήκει τοῖς ἐπικαμῖναι τῶν βοῶν καὶ ζευγνύμενος αὐτῶν, ἐμπέπηγος δὲ σφραγισθεὶς διὰ τὴν σφραγιστικὴν. εἰ μὲν οὖν τὸ ξύλον ὃ τὸ ὄντις κατὰ τὸν ζυγόν ἀπὸ τοῦ ἐλαμῶτος, καλεῖται τὸ ἄριστος αὐτῶντος ἐν τῷ μακρῷ τῷ γῆν κατὰ τὸν ζυγόν, ἐσφραγισθεὶς τὸ ἄριστος αὐτῶντος ξύλου τὸ ἀνταβλήτου αὐτῶντος καὶ τὸν ζυγόν, καὶ καλεῖται τὸ μὲν ὄντις σβουγι, τὸ δ' ἐσφραγισθεὶς ΙΣΤΟΒΟΥΕΥΣ.

II

Proclus ad 425

ΓΥΗΝ, τὸ λεγόμενον γυνάτιον τοῦ ἄριστος. αὐτῶντος οὖν αὐτῶντος, φέρει καὶ ἀπὸ τοῦ αὐτῶντος καὶ μὴ ἀνταβλήτου. λέγεται δὲ γῆν ὅτι αὐτὸς αὐτῶντος τῆς γῆς ὄντις. ΕΛΑΣΜΑ, μέρος τὸ τοῦ ἄριστος ἐν τῷ μίση τῷ ἀνταβλήτου ὁ γῆν τῷ ἱστοβῶν. ἔλασμα δὲ αὐτῶντος τὸ ἔλασμα ὁ ὄντις καλεῖται. ΙΣΤΟΒΟΥΕΥΣ λέγεται παρ' ὄντις καὶ τὸ μετὰ τὴν ἐχέτλη ξύλου. ΑΥΣΤΟΥΕΥΣ δὲ τὸ ἀνταβλήτου λέγει, τὸ ἔχειν ἐξ αὐτῶντος τὸν ἱστοβῶν.

Thomson ad 425

ΓΥΗΣ ἐστὶ τὸ ἀπὸ γῆς ξύλου τοῦ ἄριστος εἰς ὃ ὁ ὄντις, φέρει τὸ ἀνταβλήτου, ἐμβάλλεται. ΕΛΑΣΜΑ τὸ μέρος τοῦ ἄριστος ὅπου ὁ γῆν τῷ ἱστοβῶν ἀνταβλήτου τὸν γῆν καὶ τὸν ῥυθμῶν, ὁ ὄντις. ΙΣΤΟΒΟΥΕΥΣ δὲ καὶ ΕΝΔΡΥΟΝ, ὁ ὄντις.

* I print the longer version of the note from the scholia in Cod. Par. 2727 (ed. Bunsen). The shorter version, contained in Cod. Lat.

xxii. 9 and preferred by Merkel, agrees in all essentials.

Et. Magn. p. 333, 37 :

ΕΛΥΜΑ, μέρος τι τοῦ ἁρότρου ἐν τῷ μέσῳ τοῦ αὐτοῦ περιβάλλεται ἡ γὰρ τῆ ἱστοῦ αὐτοῦ παρὰ τὸ ἄλλο ἐστὶ καλύπτειν.

Et. Guil. p. 120, 34 :

ΕΥΗΣ, τὸ ἐπὶ τῷ αὐτῷ αὐτοῦ ἁρότρου τὸ πρὸς τὸ ξύλον τὸ λεγόμενον γονάτιον.

II.

W. La. 465 :

ἐχέσθαι δὲ αὐτὸ χροσίον ἀμύτην ὅ ἄρτι,
ἐπεὶ δὲ ἔρπειν ἀμύτην ἱερὸν ἀστὴν,
ἀρχόμενος τὸ πρῶτον ἄρτιον, ὅτ' ἂν ἄρτιον ἐχέσθαι
χειρὶ λαβὼν ἔρπειν βοῶν ἐπὶ τῷ αὐτῷ ἱερῷ.
ἱερῷον ἀμύτην μεσάβων.

408 ἱερῷον αὐτὸ, ἱερῷον Βιττινέ.

A.

Et. Magn. p. 173, 27 :

τοὶ δὲ ζυγοὶ τὰ τεύχεα ἐπὶ τοῦ αὐτοῦ τῶν βοῶν οἱ μὲν ζεύγλας, οἱ δὲ βοῖαι, οἱ δὲ μέσσαβα καλεῖται.

Schol. Ap. Rhod. III. 232 :

τοὶ δὲ ζυγοὶ τὰ ἐπιτεθῆναι ἐπὶ τῶν αὐτοῦ τῶν βοῶν οἱ μὲν ζεύγλας, οἱ δὲ μέσσαβα καλεῖται.

Proclus ad 467 :

ΕΛΚΟΝΤΩΝ ΜΕΣΑΒΩΝ, τὰ μέσσαβα τῶν μεσάβων λέγονται δὲ αἱ τοῦ ζυγοῦ γλῆφαι καὶ ὁ Καλλιμαχοῦ, Μίσσαβα βοῖς ἑσθῆναι. ἑλκόντων τῶν βοῶν τὸ ἱερῷον τῶν μεσάβων, τὸ ζυγὸν ἐν τῷ αὐτῷ γλῆφαι.

B.

Proclus ad 463 :

Τὸν δὲ ἱερῷον τῷ ζυγῷ περιβάλλομενος ΜΕΣΑΒΩΝ ἀνομαζόμενος, ὡς σημειώμεται κεραῖα ἐν τῷ μέσῳ ἐσθῆναι τοῦ ζυγοῦ, ὅν ἐν ΕΝΔΡΥΩΝ καλεῖται, εἰσάγει εἰπεῖν, ὅτι διὰ τοῦ αὐτοῦ, ὡς ἐπὶ τὸ αὐτὸ φέρει τῶν βοῶν, καὶ αὐτοῦ τὸ ἱερῷον ἐλκόνται τῷ μεσάβῳ. ἀνομαζόμενος γὰρ οὗτος ὁ ἱερῷον περὶ τὸ ἱερῷον ἐσθῆναι τὸ ἁρότρον. εἰ δὲ γινώσκοντο μετὰ τοῦ ἱερῷου μεσάβων, λέγει ὡς αὐτὸ τὸ ἱερῷον μεσάβων. διότι μέσων ἐστὶ τῶν βοῶν τῷ ζυγῷ ἐπιτεθῆναι ἐχθρὸν ἐπιλαβόμενος εἰσάγει τὸν ἁρότρον τῷ χειρὶ, καὶ ἐπὶ τῷ αὐτῷ ἱερῷον τῶν βοῶν, ὡς ὅτι πρόθετος γίνονται τῶν βοῶν ὅ ἁρότρον ἐλκόντων τὸ ἱερῷον, ἀπὸ μέρους τὸ ἅλως ἀνομαζόμενος τὸ γὰρ ἱερῷον ἱερῷον εἴπειν, ἱερῷον δὲ λέγει τὸ ἐπὶ τῷ αὐτῷ τῶν βοῶν φησι παρασυστάμενος ἐλκόντων ὁ μέσων τῶν βοῶν ἁρότρον.

[Σύλλα, s.v. ΜΕΣΑΒΩΝ :

τὸ μέσων τῶν βοῶν ξύλλω.]

Proclus ad 407 :

ΜΕΣΑΒΩΝ, ὁ πρὸς τὸν ζυγὸν πλάστιν ἱερῷον ὡς ἐπὶ τῷ ξύλλῳ εἴρηκε ἐσθῆναι, ὅν ἐν ΕΝΔΡΥΩΝ καλεῖται παρ' ὧν ξύλλω ὁ χροσίον, ὅ ὅτι πᾶν ξύλλω ὅν καὶ μέσα τοῖσιν τὸ αὐτὸ τὰ μεταξύ τῶν βοῶν προσδεσμένη τῷ ἁρότρου ὅ τῷ ζυγῷ ὅ τῷ αὐτῷ.

Pollux, I. 252 :

ὁ δὲ πλάστιν ἱερῷον ὅ τῷ ζυγῷ ἀνομαζόμενος ἐχέσθων ὅ ΜΕΣΑΒΩΝ καλεῖται ἀνομαζόμενος ὁ αὐτὸς ὅν περιελίσσεται ἐν τῷ τοῦ ζυγοῦ τρίσημι κεραῖα ξύλλῳ ἐμβάδοντι ὅ καλεῖται ΕΝΔΡΥΩΝ,

Τριτάτος (ed 467 :

ΕΝΔΡΥΟΝ ἔστιν ὃ καὶ ἱστειοβοῖς καὶ βοῦσι κολλεῖται. ΜΕΣΑΒΟΙ δὲ οἱ κῆροι ἐν μέσῳ ὄντες τοῦ ζυγίου καὶ συνδέονται ἐνὶ βοῦνι τῷ ζυγῷ. ὃ δὲ λέγεται ταυταῖον ἔστιν· ἔχον τῇ χθυσίᾳ εἰλωμένῃ ὄντι ἄρξιν ἁρσπῶν, καὶ οἱ κῆροι τοῦ ζυγίου διακρίναι ἐνὶ βοῦνι, δηλοῦναι τὰς βοῶν ἐκκοιμήτων.

Moschopolus ad 463 :

λέγει ὅτι λαβὼν τῇ χειρὶ τὸ ἄκρον τῆς ἐχέτης τὸ βούκετρον ἐκείνην ἐπὶ τὴν εὐνοὴν τοῦ βοῦν διὰ τοῦ ΜΕΣΑΒΟΥ, ἔχον τὴν κῆρον τοῦ πυρὸς τῷ ζυγῷ ἢ προσδέσσειν ὃ ἱστειοβοῖν, διακρίναι τὸ ΕΝΔΡΥΟΝ. ἔχον αὐτὸν τὸν ἱστειοβοῖν ἀπὸ μένου δὲ ὅλον λέγει τὸ ἄκρον.

Hezych. s.v. ΜΕΣΑΒΟΝ :

ἐξ ἁρσπῶντος ἱστειοῦ τῇ τῶν ἱστειοβοῶν πρὸς μένου τὸν ζυγόν προσδέσσειν ὃ τὰς ἐχέδας.

[Hezych. s.v. ΙΣΤΕΙΟΒΟΥΣ :

βοῦνι ζυγῷ ἐν τῷ ἄκρῳ· ἄλλοι δὲ μέρος αὐτοῦ ὅπου ἔστιν ἔρθῃ ἱστὸς ὡς περ ἱστὸς.]

The passages of the *Works and Days* which deal with the plough are two in number. The first (427 ff.) begins with instructions to the farmer as to the wood required for a plough, and passes, by an easy transition, to the oxen and the labourer to be employed when ploughing. The second (467 ff.) describes the process of ploughing, and gives incidentally some information as to the yoking of the oxen. The second passage thus serves to supplement the first, where nothing was said about the yoke.

The words which Hesiod employs in these two passages are all technical. In literature it is only in the learned poetry of the Alexandrian and later ages that any of them recur, and our knowledge of their meaning is mainly derived from grammarians and lexicographers, whose own information is often imperfect and often obscurely expressed. The authorities are classified⁴⁸ and set out above. On both Hesiodic passages two main views are to be discerned among the authorities, the difference in each case turning on the interpretation of a single word. In both cases, also, the scholia which bear the name of Proclus give the two interpretations without a hint that they are conflicting.

We will consider, first, the passage which deals with the body of the plough. The words whose meaning is here to be determined are γῶνς, ἑλμα, ἱστειοβοῦς, αὐτόρμος. To these we may add the plough-tail, ἐχέτης, from 467, since the ἐχέτης belongs to this part of the plough; but in this case the meaning of the word is discernible from Hesiod himself, and there is no difference of opinion among the authorities.⁴⁹

I.

A.—The authorities, as has been said, fall into two classes. I take, first, the explanation given by the *Etymologicum Magnum*, the scholia to Apollonius Rhodius, Pollux, Proclus in his longer note, and Moschopolus.

⁴⁸ For the sake of convenience I have sometimes been compelled to divide notes into their component parts.

⁴⁹ It is correctly given by Photius, Suidas, Zonaras and *Et. Mag.* v. v. in addition to the

passages quoted above. Hezych. gives the correct meaning and adds καὶ ὃ ἀλλὰ καὶ ὃ σπῆν τοῦ κούρου. For these meanings there is no other evidence nor are they intrinsically probable.

These writers are agreed that *ἔλμα* is the operating part of the plough which does the actual work of breaking the ground,⁴⁹ γῶγς the curved beam projecting from the *ἔλμα*, to which the front part of the pole *ισταβοεύς*, is attached. We learn from them, further, the names of some parts of the plough not mentioned by Hesiod—*ῥῖγς* or *ῥῖγος* the iron share, *ἔχέλη* the socket of the *ἔχέλη*,⁵⁰ *χειρολαβίς* the handle inserted in the *ἔχέλη*. *Χειρολαβίς* and *ῥῖγς* can be seen on some of the representations of ploughs given above, but they have no bearing upon Hesiod, and I shall say no more about them.⁵¹

If, therefore, we omit for the moment two points where the authorities who represent this tradition are not agreed, we may construct from this account a plough which corresponds exactly with the early ploughs of Form III, shown on h-f vases (Fig. 15: based on Fig. 3).⁵² This explanation of Hesiod is therefore strongly supported by the external evidence, and it goes back to a good authority, for as the scholiast to Apollonius tells us,

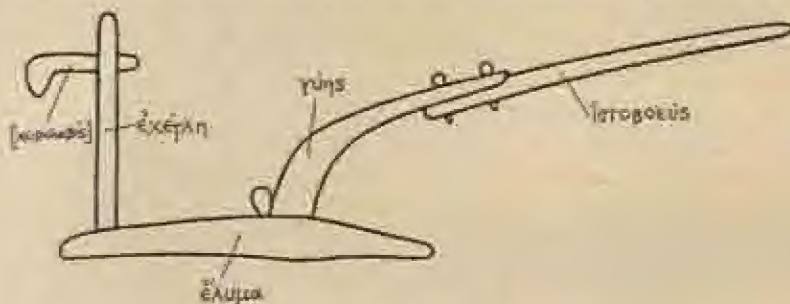


FIG. 15.—Diagram of Hesiod's Plough.

it is derived from Eratosthenes, that is to say, it represents the conclusions of Alexandrian scholarship in the third century B.C.

The authorities who give us this explanation differ, however, upon two points of detail. First, Proclus and Moschopoulos say that the *ἔχέλη* is fastened, not, as we are told by the *Etymologicum Magnum*, to the *ἔλμα*, but to the γῶγς. Secondly, Proclus in both his notes asserts that a plough is αὐτόγῳγος when the γῶγς extends as far as the yoke, that is to say,

⁴⁹ Pollux's sentence *ἡ δὲ γῶγς ἐκέρχεται ἔλμα* is incompatible with the rest of his account which makes his view of *ἔλμα* quite clear. There can be no doubt that *ἐκέρχεται* should be read for *ἐγγείνεται* as was proposed by E. Veckemans (1866, p. 559). In the last sentence of Moschopoulos's note, γῶγς is used for the whole pole (γῶγς + *ισταβοεύς*): as the *ισταβοεύς* does not occur in all ploughs the use is quite intelligible.

⁵⁰ Pollux seems to think that the back portion of the *ἔλμα* was called *ἄλμα*.

⁵¹ L. and S.'s reference for the form *χειρολαβίς* will be more readily found in Pollux, *Μετ.*

Συμμ. iv. 78. 23 (ed. Schenck) but the passage has nothing to do with ploughs.

Hesiod's silence as to the share does not prove that his plough was without a share as he is considering only the wooden parts of the implement. There are in the British Museum plough-shares of the bronze age from Cyprus. For Roman shares see Lindenschmidt, *Alt. u. Arch. Forsch.* III, iv. 122.

⁵² The handle Hesiod calls simply *ἔχέλη* which perhaps implies something more like the form shown in Fig. 2 than the regular *χειρολαβίς* in the diagram.

when there is no need to add an *ἐπὶ τοῖς βείοις*. According to the *Etymologicum*, however, it is so called when γῶγς and ἔλμα are in one piece,⁵¹ and this seems to be the meaning of the scholiast to Apollonius, though the passage would not be intelligible without the help of the parallel passage in the *Etymologicum*. Some light is thrown on the origin of Proclus's divergence from the Eratosthenic tradition in these particulars by the monumental evidence which we have already considered.

First, as to the handle. We have seen that, in the earlier ploughs, ploughtail and pole tend on the whole to be distinct from each other, and are sometimes separated by a considerable space, but that in later times they tend to be close together and, in some Italian examples, spring one from the other instead of rising side by side from the stock. Proclus and Moschopolus seem, therefore, to be interpreting Hesiod by reference to a type of plough which was apparently unknown in Greece, and in this particular their evidence may safely be rejected.

Secondly, as to the meaning of αἰρόγυος. The development of the plough which led to the uniting of pole and tail at the hinder end of the stock resulted, as we have seen, in a reduction of the stock both in size and importance. Whereas, in the earlier form, a plough might naturally be thought of as a stock with two appendages, it becomes in the later a pole with two appendages; for the γῶγς, not the ἔλμα, is now the important part of the instrument.⁵² This change in the relative importance of the parts is true of the ordinary variety of Form IV., and it is especially conspicuous in the type of plough which Proclus has in mind, for there the tail springs, not from the stock at all, but from the pole (cf. Fig. 2 and Pl. XVII. 6). Now if a plough in which the stock is the most important member (as in Fig. 15), be called αἰρόγυος, the epithet can easily be understood as predicating something of the γῶγς in its relation to the ἔλμα, which is the main beam of the plough. But if it is said of a plough of Form IV. that it is αἰρόγυος, 'has a natural γῶγς,' then the adjective is naturally taken to refer only to the γῶγς, for the γῶγς is now the main beam, and the ἔλμα, which has become an appendage of the γῶγς, drops out of sight and is not taken into consideration by those who seek to ascertain the meaning of the word αἰρόγυος by looking at the plough in use in their own time.

It seems therefore probable that, where Proclus and Moschopolus differ from the authorities with whom they are in the main in agreement, their dissension is due to the fact that they or their immediate authorities were thinking of a later form of plough, and attempting to fit Hesiod's description to it. The true meaning of αἰρόγυος is that given by the *Etymologicum Magnum* (presumably following Eratosthenes), and Hesiod's distinction between αἰρόγυος and περὶός is clearly borne out by the monuments, for it is the distinction we have already drawn between ploughs of Form II. (not excluding I.) and III.⁵³

⁵¹ So also Schol. Hom. K. 353.

⁵² So Virgil speaks of *curvus aratro* meaning, as we shall see, the curved γῶγς; cf. Lucr. v. 932, et. 1253; Ovid, *Her.* i. 55.

⁵³ Eustathius p. 1732, 2, holds that the *περὶος ἀεργος* was earlier than the *αἰρόγυος*, but that is mainly because Homer does not mention the latter; cf. p. 956, 57.

B.—We come now to the second class of authorities, which is represented by Proclus, Tzetzes, and entries in *Et. Magn.* and *Et. Gud.* Here we are confronted with an entirely different interpretation of Hesiod, for we are told that γόγς is the operative part of the plough to which the share is attached, ἰστροβοεὺς the pole, and ἔλγμα the central part where γόγς and ἰστροβοεὺς are united.

Before we consider this explanation it may be well to observe that the opening words of this note of Proclus's, γόγς τὸ λεγόμενον ἡνωτήριον τοῦ ἀρότρου, are out of place. They belong to the first interpretation which we have already discussed, and recur in Mosehopolus's version of that explanation. They describe the γόγς as the curved base of the pole; but here we are told that γόγς is something quite different, and it is clear that the offending words have crept in by confusion in the two interpretations.

The new view put forward in these passages need not detain us long for its origin is clear; it is etymological, and connects γόγς with γῆ, ἔλγμα with ἐλνεῖν. The inventor of these etymologies, if he considered a real plough at all, probably had in his mind one which we should classify as a variety of Form IV. Our representations of that form are for the most part so small that it is impossible to make out the exact connection of the main beams, but the Marian coins (Pl. XVII. 15-17), the Arlon relief (Fig. 9), and the plough from Cod. Harl. 603 (Fig. 13), as well as the earlier Talamone votive plough (Pl. XX. iii.), all have a sort of solid centre from which the three main timbers start, and it is perhaps a plough of some such form as these which suggested the interpretation.

So far as the interpretation of Hesiod is concerned, there can be no possible doubt that the first tradition is right and the second wrong. The first goes back to Eratosthenes, and describes accurately what the monumental evidence conclusively proves to have been the early form of Greek plough. The second describes a form (if indeed it can be said to describe a real form at all) which, in its essential features, is later, and it is supported by precarious etymologies.⁵⁴ We need, therefore, have no hesitation in rejecting it.

Now that we have thus determined the form of Hesiod's plough, it remains only to add that the wood is selected for special qualities which fit it for the parts named. The γόγς is to be πρίνον, says Hesiod. The holm-oak is celebrated for the toughness of its timber, and it is on the curved part of the pole that the main strain falls when the plough is in use. The front part of the pole is to be of bay or poplar, the stock is to be of oak. Oak, as we are told by Theophrastus, resists rot better in earth or water; poplar when exposed to the air.⁵⁵ As to laurel, we are told by the same authority that though it rots readily, it is preserved against insects by its natural bitterness.⁵⁶ When Pollux and Proclus (in his longer note) say that

⁵⁴ The etymology of ἔλγμα is uncertain: γέρ is connected with γάλα, γέλας.

⁵⁵ H.P. v. 1. 2.

⁵⁶ C.P. v. 2. 4.

the *ιστοβοεὺς* was fastened with pegs to the *γῶγς*, they are following Hesiod,²⁷ and the pegs are clearly to be discerned on the coins of Thrace and of Alexander, and in the peculiar Spanish plough on the coins of Obulco (Pl. XVII. 5, 9, 18). This, however, is not the only way in which the beams were joined, for some of the monuments show them lashed together with ropes or thongs (Figs. 1, 3 and 6, Pl. XVII. 2).

II.

We may now turn to the passages which deal with the yoking of the oxen to the plough. Here also we are confronted with a double tradition.

A.—As representatives of the first tradition we have now only the *Etymologicum Magnum*, the scholiast to Apollonius, and Proclus; for Pollux, who was with them on the first passage, here changes sides. The view given by these authorities is that *μέσαβα* means the curved recesses of the yoke which fit the necks of the oxen. They do not say what *ἐνδρουν* means, but Proclus, who, as before, gives both views without comment, appears to think that it is the yoke itself, for he paraphrases *ἐνδρουν μεσάβων* with the words *τῶν ζυγῶν ἐν ᾗ αἱ γλῶφαι*. He held therefore that *βοῶν ἐνδρουν ἐκόντων μεσάβων* meant 'of the oxen who draw the collared yoke.'

The source of this interpretation of *ἐνδρουν* is unknown, but we have again the authority of Eratosthenes for the statement that *μέσαβα* means *ζευγαὶ* and collateral evidence that this was the Alexandrian view. When Callimachus said *μέσσαβα βοῶν ὑποδός*,²⁸ and Lycophron²⁹ used the phrase *μεσσαβοῦν ὑπὸ ζευγαῖσι* they clearly had this or some very similar interpretation of the word before them. On the view maintained by the rest of our authorities both phrases would be unintelligible.

B.—The second tradition, for which the main authorities are Pollux, Proclus, Tzetzes, and Moschopoulos, is that by the word *μέσαβα* Hesiod means the thong by which the yoke was lashed to the pole. With regard to the meaning of *ἐνδρουν* there is a difference of opinion. Pollux and Proclus state that it is a wooden peg which fits a hole in the yoke and secures the end of the thong. Proclus, however, apparently observing that the words *βοῶν ἐνδρουν ἐκόντων μεσάβων* offer no reasonable meaning on this hypothesis,³⁰ gives as alternatives the meanings *ζυγός*, *ιστοβοεὺς* and *ἐλμα*. Tzetzes and Moschopoulos are for *ἡμῶς* or *ιστοβοεὺς*. As to the construction, opinions are again divided. Moschopoulos, like Proclus, takes *ἐκόντων* as agreeing with *βοῶν*, and paraphrases *διὰ τοῦ μεσάβων ἐκόντων*, Tzetzes takes *μεσάβων ἐκόντων* to be a genitive absolute.

In this case Hesiod's real meaning is much more problematic since the monumental evidence gives little or no help. On the vases the profile of

²⁷ Hesiod's language is not quite clear and might refer also to the peg already mentioned, which fastens together stock and pole.

²⁸ Fr. 513.

²⁹ 517. The scholia there say, αἱ τοὶ ζυγοὶ

γλῶφαι and quote the phrase from Callimachus.

³⁰ His paraphrase *τῶν ἡμῶν εὐνοαλίσκος ἐκόντων ἢ πέρας τῶν βοῶν ἐλμα* is nonsense if the peg is inserted in the yoke.

the oxen is given and it is impossible to distinguish how the yoke is attached. Nor do the bronzes or coins give us much assistance.⁶¹

However, since Eristhenes proves to have been well-informed on points where his evidence can be checked, we may, I think, accept his evidence here, and with the more confidence in that on no view of the construction and meaning of the passage does the mention of the thong which holds yoke and pole together seem appropriate. As to the construction, it is natural to take ἐσάρτωρ as agreeing with ὄσσε, for the dragging is done by the draught-animals rather than by a part of the plough. Μέσαβα means therefore 'by the collars'.⁶²

For the meaning of ἐσάρτωρ we are left to conjecture, for the main authorities of the Eristothene tradition are silent. Proclus, in the section in which he follows them, paraphrases ζυγόν, but this may be merely due to his misunderstanding of the genitive μέσαβα; and since he suggests elsewhere ἰσοβοεῖς and ἄρμα—that is, any part of the plough except the tail and the γόνυ—he can hardly be trusted to guide us right. Since therefore we are reduced to guessing, I incline to guess that ἐσάρτωρ means either ἰσοβοεῖς or the whole pole composed of ἰσοβοεῖς and γόνυ. And I select this part of the plough rather than any other, not because it is recommended by Tzetzes and Meschopulus, but because it is the part most intimately connected with the collars and the application of the motive force and therefore more likely than the other parts to be mentioned here.

It remains to consider briefly the interpretation which we reject. The thong fastening yoke to pole certainly existed (it is called ζυγόδεσμος in Homer⁶³) and it may sometimes have been secured by a peg in the yoke though there seems to be no evidence of this outside the passages we are considering.⁶⁴ Why the words ἐσάρτωρ and μέσαβα should have been referred to these parts is uncertain, but the etymology given by Proclus and Suidas suggests that someone looked in μέσαβα for a part which came 'between the oxen',⁶⁵ and the yoke fastenings certainly answer to that description. Whether the substitution of forehead-straps for the yoke (as seen in Fig. 9)⁶⁶ has

⁶¹ On the vase-stem group from Tanagra the yoke is fastened to the pole by a peg and lashed, and the yoke of the Talamum vase-plough is attached to the pole by a peg. In the Arcora bronze the pole passes through a hole in the centre of the yoke. On the coin of Ti. Gracchus (Pl. XVII, 13) may be seen the *agros* mentioned by Pollux and two projections which perhaps serve to secure the lashing.

⁶² As *vetter* *Index* p. 289, s. 10. Proclus seems to have read *parabē* with Triclinius, but the gen. is no doubt correct.

⁶³ Cf. *Cato R.R.* lxxix: in aratrum subligula lora, p. xvi; funiculum, p. viii.

⁶⁴ Unless the enigmatic *πλαγὴ* of *Il.* 274 is such a peg.

⁶⁵ The sentence in Proclus's note on 165 which begins *et si quis dicat* *μέσα* *ἐν* *τῷ* *ὄσσει*

seems to mean, 'If we read *parabē* for *μέσα* then the *ἐσάρτωρ* is meant, and this might be called *parabē* because it is between the oxen.' This seems to imply *parabē* as an adjective from *παρά*, an interpretation not given by any other commentator. Suidas's gloss is similar, but regards the word as a noun; it can hardly refer to the Hesiodic passage.

⁶⁶ On this subject Columella ii. 2. 22 is worth quoting: *igitur in opere bonis arce junctas habere conuenit quo speciosius ingredi enter uallibus et clauis capitibus, ac munucella eorum labefactentur: lignumque mollius aptum cornibus insidat, hoc enim genus funtibus maxime probatum est. nam illud quod in quibusdam promissis usurpatur et cornibus illigatur iugum fere repudiatur ac emulius qui praecepta rustici conseruauerunt.*

contributed anything to the confusion must remain doubtful. Etymology, as we have seen, was responsible for errors in commentators of this group when dealing with the first Hesiodic passage, and it may well have misled them again here.

To etymology we may also ascribe Hesychius's gloss on the word *ιστοβοεύς*, which I mention last because it falls outside the two clearly defined groups we have been discussing. Hesychius identifies the *ιστοβοεύς* first with the yoke fastening (probably by confusion with some comment on *ἀετοβα*) and secondly with some projecting part of the yoke or plough which resembled a *ἵστος*. He may have meant the peg mentioned by our scholiasts, or perhaps the Homeric *ἵστορ*, which is a peg fastened in the pole, or possibly even with the upturned end of the pole itself which Homer calls *πῆξ*, and Pollux *κοῦμν*. These interpretations are certainly erroneous, but they furnish another illustration, if illustration be needed, of the confusion which prevailed among grammarians as to the meanings of the words in our two passages.

III.—*Virgil*

Virgil, *Georg.* i. 100.

- 160 Discidium et quae sunt duris agrestibus arua,
quis sine uoc potuere uel non surgere missos
uomis et inflexi primum gressu robore uicti
tardisque Eleuinae uictis uoluntia planctus
tribulaque trahimusque et iniqua pendere (sati)
165 uirga praeterea Caeli uilisque suppellex,
arbutae crates et mystici uinum laethi,
omnia quae multo ante memor prociis reponas,
si te digna manet diuitio gloria ruris.
continuo in siluis magna ut flexa domatur
170 in laeta et curui formam accipit alnus aratri.
hinc ab stirpe pedes tenio protentus in octo,
hinc aurum, dapifer aptantur dentalia domo,
caeditur et tilis ante iugo leuis abbaque fagus
atqueque quae curru a iugo torquet ilice;
175 et suspensi focis explorat robora fumum

174 *siluius quae*. Voss al. 173-174 transposuit Schrader.

Varro, *L. L.* v. 19.

Aratrum, quod arui terminus eius harum. Vomer, quod uomit no plus terram. Dens, quod no mordetur terra. Supra illi regula quae stat, stius: ab stando et in ea transversa regula manica, quod manu bubulis tenetur, qui quasi tenus est inter homines, hara a bubus; alii hoc a curuo aruius appellant. sub iugo medio cauum, quod hara extrema uulsa appellatur, uocatur eous a caue. iugum et uomerum ab iuncta.

Nomius, p. 80, 16.

Bura dicitur pars aratri posterior & decurua. Vergilius *Georgicon* lib. i.

continuo in siluis magna ut flexa domatur
in laeta.

arque immixta, plus uulm quereid pendes
cullo et pectore cunari quam cornibus atque hoc
modo tota mole corpore totoque pendere
nituntur, at illa retracta et compuncta capilli
bus exaruantur atqueque fortius autem

partem leui admodum uomere iungunt.

* I assume the text to be sound here though the alteration of *posterior* to *prior* would remove the dissimile from our authorities.

Varro *de Re Rustica* lib. 1. [19. 2].

at saepe fracta laura relincent mouerem in aruo
hanc Vergilius *burim* vocavit.

Servius and Schol. *Don.*:

170 *IN BURIM* in curuaturam: nam *buris* est curuamentum aratri, dictum quasi *bois oleis* quod sit in similitudinem caudae bovis. alii *burim curuaturam temonia* quae supra est, et quod est infra arumam dicunt: *buris* enim ut *curuatur*, ante igitur dicitur, id est amburitur: unde et quae antea videri conueniuntur curuis, ita dicuntur, Varro ait *statum burim* indigi ab urbe.

172 *BINAE AURES* duas quibus latior sulcus efficitur. *DUPLEXI APTANTUR DENTALIA* dentale est lignum, in quo vomer inducitur. duplici autem domo aut lato, ut [ibid. 87] at duplex agitur per lumbos spina: aut re vera duplici, cuius utriusque eminent latus: nam fere huiusmodi sunt nomeres in Italia.

174 *STIVAQUE* mania aratri, qua regitur, id est gubernacula. Ceterum in Scauriana a stiva ipsa membra homines loquebantur. curvus autem dixit propter murem provinciae suae in qua strata habent rotas, quibus laementur.

170 *temonem burim* dicit a *bura*. Thilo

Boyer's Repository:

170 *IN BURIM* pars aratri, quae curuatur, *buris* dicta ut videtur Modesto a *bustione* igitur enim *lectur*: quae *bois oleis* quod sit in similitudinem caudae bovis.

172 *BINAE AURES* quibus latior sulcus efficitur.

171 *TEMO* circumarathir.

172 *DENTALIA* id est in quibus vomer inducitur. hic neutraliter, postmodum masculino generis [c. 261] *Durum* procedit arator.

174 *STIVA* aratri gubernaculum. *CURVUS* idem curvus propter murem provinciae suae in qua strata habent rotas.

171 *circumarathir*. I am indebted to Prof. Hensman for the discovery that this gloss is Irish. Mr. K. C. Quiggin, to whom I referred it, kindly tells me that *arathir* is gen. of *arathra*, 'a plough.' The meaning of the first part of the gloss cannot be determined and it is probably corrupt.

If we turn now to Virgil, it will be seen that the words whose meanings we now have to determine are *uomis*, *buris*, *temo*, *aures*, *dentalia*, *stiva*. Some of these however are not in dispute; *uomis* or *thinner* is the share, *temo* the pole or part of it, *aures* the earth-boards which serve to widen the furrow.⁸⁵ The dispute among the authorities centres upon *buris* and *stiva*, and the exact meaning of *dentalia* remains uncertain, not because the authorities disagree but because their accounts are deficient in lucidity and the archaeological evidence does not supplement them.

First then for *buris* and *stiva*: and here, as in the commentators on Hesiod, we find two views. The protagonists are Varro and Nonius, while Servius seems to play the part of Proclus and give both views.⁸⁶

A.—According to Varro, *stiva* is the tail of the plough in which is inserted a handle, *manicula*; *buris* (Varro uses the form *bura*) is the

⁸⁵ Cf. Palladius l. 48. 1: *aratra simplicia*, vel, et plura regio permittit, auribus quibus possunt contra stationem humeris libere nata

coluere videri attolli: and see note 25 above.

⁸⁶ His first interpretation is not explicit but probably gives the Nonian view.

pole, sometimes called *arvum*.⁷⁰ That is to say, *stima* = ἐχέταλη, *minicula* = χείρολαβή, *buris* = γόη.

B.—According to Nonius, *buris* is the curved tail of the plough. Servius and the *Brevis Expositio* add little to this except that they are agreed that *buris* is curved, and this we know already from Virgil, who recommends his farmer to bend it into the required shape while it is still growing on the tree.

Of these two authorities, Varro and Nonius, Varro is immensely the weightier. His etymology does not, it is true, inspire confidence, but he is a man of real learning and, what is more important, a practical farmer⁷¹ and a student of agriculture, and he died only a few years before Virgil. If therefore Varro says that *buris* is the pole of the plough, very serious reasons must be adduced before we can reject his testimony. And Varro has not merely stated his opinion that *buris* means pole: the word was clearly familiar to him and he has used it in that sense in his treatise upon husbandry, where he writes:⁷²

alia terra faciliior aut difficilior est: aliam terram boues proscindere nisi magnis viribus non possunt et saepe fracta bura relinquunt numerem in arvo.

For obviously the part of the plough which breaks and leaves the share in the furrow is (*pote* Nonius) not the tail but the pole.

Thus even if it were merely a matter of weighing authorities we should, I think, be compelled to reject the testimony of Nonius (on which some recent commentators rely) and accept Varro's statement. There is, however, further evidence to support Varro. Virgil's *buris* is curved, as we learn both from him and his commentators. Now we have several representations of ploughs of the first century B.C. (Pl. XVII. 11–17) and in all of them there is only one curved timber, namely the pole. The tail, as in the Greek plough, is an upright post, and this fact should suffice to dispel any lingering prejudices in favour of the Nonian interpretation.

In Virgil therefore *buris* is the pole, and it follows that *buris* + *temo* = γόη + ἵστροβοεύς; it is worth remembering that *buris* is etymologically connected with γόη. The only fact to be accounted for is the length of eight feet which Virgil assigns to the *temo*.⁷³

This may at first sight appear excessive; but the *temo* and *buris* together have to reach from a point beyond the yoke to one some little distance behind the heels of the oxen. In the early Greek ploughs some considerable part of this distance is covered by the γόη, and the ἵστροβοεύς was probably less than eight feet in length, but if Virgil's *buris* was smaller in proportion to the *temo*, eight feet cannot be considered excessive for the latter. According to Cato,⁷⁴ the reins for a wagon should be 26 feet in

⁷⁰ Schol. Dan. distinguish *buris* and *arvum*; the only other evidence, a confused gloss of *fruma*, s.v. *arvum*, does not help to decide the real meaning of the word *arvum*.

⁷¹ *R.E.* i. 1–11.

⁷² *R.E.* i. 19. 7, 1.

⁷³ What the meaning of the words *a steep* may be I do not understand.

⁷⁴ *R.E.* i. 101.

length, that is, each rein 13 feet: and if we consider that in a plough the tail rises immediately above the base of the pole and that *curvis* and *temo* together thus constitute practically the whole length of the instrument, it will be seen that eight feet is a reasonable dimension for the *temo*.⁷³

As to the Nonian interpretation, it is of course impossible to ascertain either its source or its date, but it looks as if it came from some form of plough in which the tail was curved and the pole straight. These characteristics, as we have seen, are not found in the numerous representations of ploughs which have survived from the first century B.C., but they do occur in certain examples of later date⁷⁴ and it seems possible that a plough of this type may have led to Nonius's error.

Servius, it may be noted, regards Virgil's plough as wheeled, a view suggested by the difficult *occuris* of v. 474. So far as interpretation goes, this suggestion helps very little, and it is in itself most improbable. The wheeled plough does not become common until many centuries after Virgil's death and it was, according to Pliny, a novelty in the first century A.D. Moreover the wheeled plough, in all examples known to me, has a straight pole and indeed the form almost demands this modification. Virgil's plough, however, has, like Hesiod's, a curved pole.

The origin of these mistakes then seems to me explicable enough. As to the *dentalia*, we have the evidence of Servius that it or they are the stock, and the same may be inferred from a passage of Columella who, when speaking of the weakness of small cattle, writes:⁷⁵

et ideo minoribus aratris moliantur, quia non valent [sc. bones] alto perfossa novulum terga rescindere: quod cum sit, omnibus iumentibus plurimum confert, nam penitus arvis subactis maiore incremento segetum arborumque locus grandescunt, et in hoc igitur a Celso differentia: qui reformidans impensam quae scilicet largior est in amplioribus armentis, censet exiguis novulis et dentalibus terram subigere.

The word occurs further, in the singular, in an obscure passage of Pliny⁷⁶ which may be transcribed here:

onomerum plura genera, culter vocatur inflexus praedensam priusquam proscindatur terram secans futurisque sulcis vestigia praescribens incisuris quas resapiunt in arando mordent onomer. alterum genus est vulgare rostrati iocis, tertium in solo facili, nec toto porrectum dentali sed exigua cuspidi in rostro, latior haec quarto generi et acutior in mucronem fastigata eodemque gladio scindens solum et aequo laterum radices herbarum secans, non pridem inventum in Baetia Galliae duas addere tali rotulas quod genus vocant planmorati, cuspidi effigiem palae habet, secant ita non nisi culta terra et fere nova, latitudo onomeris cuspites nersat.

⁷³ A primitive wooden plough found in Jutland measures over all 2.40 m. but in this case the tail beam slopes backward (S. Möller, *op. cit.*, p. 22 and Fig. 1).

⁷⁴ Cf. Figs 13 and 14.

⁷⁵ *il.* 2. 22: cf. further *Dei.* 1. 72: *sulcos iocis dentalia*.

⁷⁶ *N.H.* xviii. 1711.

In the large majority of the representations of ploughs which have come down to us the upper surface of the stock is invisible and the archaeological evidence does not enable us to elucidate Virgil's precise meaning. Perhaps we may believe Servius that the stock had a deep groove running down its centre so that the weight of the implement could be reduced without affecting the width of the resulting furrow. The stock would then have a V-shaped section and might well be described in the terms used by Virgil.

It appears from Pliny that in his time several varieties of ploughshare were in use and that the stock was subject to corresponding modifications.¹⁹ His language is, however, hardly clear enough to admit of our identifying the varieties of which he speaks. His *cutter* is perhaps represented by the type of plough which we have seen on the coins of Marius (Pl. XVII 15-17); his second *genus vulgare*, is clearly the common Graeco-Roman plough of Forms III and IV. His third and fourth varieties I do not venture to identify on the monuments, nor do I fully understand Pliny's meaning. His fifth variety, the Gallic wheeled plough, as has been said, does not appear on classical monuments, but the spade-like share of which Pliny speaks is still noticeable in the representation given in Fig. 14.

A. S. F. Gow.

KEY TO PLATE XVII.

Genus.

1. Brown paste: Berlin 6195.
2. Sand: Berlin 4603.
3. Green Jasper: Brit. Mus. 187.
4. Sand: Brit. Mus. 2023.

Coin.

5. Thracian Chersonese (before Alexander): B.M. Cat. *Thracian*, p. 194, 29.
6. Medallion of Commodus: B.M. cf. Cohen *Méd. Imp.* III, p. 262.
7. Centuripe (late decline): B.M. Cat. *Sicily*, p. 56, 12.
8. Corinth (326-220 B.C.): B.M. Cat. *Corinth*, p. 26, 250.
9. Alexander: B.M.
10. Etna (2nd cent. A.D.): B.M. Cat. *Sicily*, p. 59, 7.
11. C. Vibia Pansa (c. A.D. 49): Grueber *C. Essai*, p. 510, 3972.
12. Q. Scipio (Africa: A.D. 47): cf. B. p. 373, 10.
13. T. Gracchus (c. 2 = 37): cf. B. p. 330, 4314.
14. C. Julius Caesar (c. A.D. 29): cf. B. p. 17, 1363.
- 15-17. U. Marcius (c. A.D. 82): cf. B. p. 364, 2850, 2853, 2855.
18. Obulus: B.W. cf. Heber *Münz. Ant. de l'Espagne* pp. 501 ff. pl. XIII.
19. Tyre (Sept. Severus): B.M. Cat. *Phoenicia*, p. 202, 247.
20. Ptolemais (Nero): cf. p. 131, 18.
21. Alexandria (Antoninus Pius): cf. *Alexandrie*, p. 122, 1091.

ADDENDUM.—P. 262. The guide-rope seen in Pl. XVII, 3 runs on the plough-pole held by Triptolemus on the Tarras Farmstead (Fortmangler, *Ant. Germ.*, T. IV., [p.]).

¹⁹ Cato (*R.E.* CIVI.) seems to speak of the *Onigrae* (ii. 22-31) recommend *legi* detachable shares, and for summer ploughing *xietho Superdop*.

NOTES AND QUERIES ON ATHENIAN COINAGE AND FINANCE.

THE following notes and queries have been mainly suggested by Professor Percy Gardner's recent article on the Coinage of the Athenian Empire.¹ They do not claim to do more than elucidate one or two small points with the aid of rather fuller use of epigraphical evidence than is to be found in his article, and at the same time raise other questions of secondary importance in the same connexion. If no solution is offered here to some of these queries I see no cause for regret for it may be found convenient by others to have here collected references to such inscriptions as seem to deserve further investigation from the standpoint of the numismatist. The inscriptions here mentioned belong both to the 5th and 4th centuries and so are not confined within the chronological limits of the Athenian Empire.

In the first place it may be as well to distinguish roughly the classes of Attic inscriptions in which numismatic evidence is found, in particular that for the circulation of non-Athenian coins in the Athenian Empire. 'Treasure-lists' which record the receipt and transmission of sacred objects of value by their successive boards of curators, frequently, especially in the fourth century, make mention of coins, giving their denomination and number. This evidence as a rule, when it can be dated, can only supply a *terminus ad quem* for the date of the issue of such coins; it cannot be used to establish whether such coins were current or not at the time of dedication, still less afterwards. More valuable in this direction are those inscriptions which record payments made in coins other than Athenian, and with these may be coupled one series which clearly records that a body (the curators of the Parthenon building-operations) refrained from using some foreign currency which they had in hand throughout their period of office.² From this second group clearly dated information may be obtained regarding the currency of non-Athenian coins in the Empire.³ There are moreover other Attic inscriptions making mention of gold coins, of which the purport is less certain,⁴ and in the absence of a definite date these can only be used with

¹ *J.H.S.* xxxiii. (1913), pp. 147-188; I am also indebted to his article 'The Gold Coinage of Asia before Alexander the Great,' *Proc. British Academy*, lii (1906); and to his criticism and encouragement during the preparation of these

notes.

² See § 1 (a).

³ Some examples appear below, in §§ 1 (b), 2.

⁴ See pp. 246, note 22, 286.

great caution. Finally from other miscellaneous inscriptions we may glean evidence on such points as the relative value of gold and silver, and the exchange rates between coins of different communities⁶; these are of especial interest when they can be dated, as they supplement on some points our knowledge from literary and numismatic sources. These are by no means all the classes of inscriptions which give help to the numismatist, but they are a rough indication of the headings under which may be conveniently divided such inscriptions as I propose to allude to in these notes. In view of their miscellaneous nature it seems preferable to follow a subject-order rather than a strictly chronological one.

I.—The Electrum and Gold Staters of Lampsacus and Cyzicus.

(a) The date of the electrum 'Lampsacenes' may be placed on a rather more accurate basis than hitherto. The 'Attic inscription of B.C. 434, the occasion of which we have not yet been able to determine,'⁷ in which staters of Lampsacus (and Cyzicus) are mentioned, is a fragment of the building-record of the Parthenon⁸ for that year: in it is recorded the carrying forward from the surplus of the previous year of 70 staters of Lampsacus, and 27 staters and one *hekte* of Cyzicus. These are found in every year's record that is preserved, right from the beginning of the accounts, and thus were clearly never used in payment for any of the work.⁹ They are in hand at the beginning of the third year's work, and as apparently no work took place during the second year of the building,¹⁰ they were acquired during the first year (447/6). Thus the *terminus ante quem* for the existence of these Lampsacenes may be pushed back to 447. The fact that they were never used in payment indicates that the commissioners did not regard them as in current circulation along with Athenian silver during these years. Whether they belong to a still earlier date and had definitely ceased to be current it is impossible to decide. The argument that they were not used because they were an odd sum may be dismissed, for within twenty years of the conclusion of the work on the Parthenon we find staters of Cyzicus, and an odd sum at that, used in payment of Athenian *στρατηγοί*.

(b) That Cyzicene staters were used during the Peloponnesian war—at least after the peace of Nicias—for Athenian official payments to supplement the Attic currency is well known. In the inscription¹¹ recording the sums voted and paid to *στρατηγοί* and for other purposes in the years 418 ff. we find that Cyzicenes were used on three different occasions. (1) In 418/7 more than 4000 are paid 'to the tri-arches to Argos,'¹² (2) In 416/5 the

⁶ See pp. 275, note 17, 282, note 24.

⁷ P. Gardner, *J.H.S.* *op. cit.*, p. 135, l. 17.

⁸ See Diemmoor's brilliant and convincing restoration of the fragments of this record. *A.J.A.*, xvii. (1913), pp. 53 ff.

⁹ Cf. Carraigan, *Le Trésor d'Athènes*, *Invent.* p. lxxvii.; *B.S.A.*, xvi. p. 190; P.

Gardner, *op. cit.* p. 134, alludes apparently to these staters as "in the treasure-lists of Athens."

¹⁰ Diemmoor, *op. cit.* p. 63.

¹¹ *I.G.* i. 180-183; *Dittenhofer, Syllog.* 37 = *Hekke-Hill*, 70.

¹² *Ll.* 12, 13.

last payment of the Attic year was an unknown number to Alcibiades and his colleagues for the Sicilian expedition.¹² (3) In 415/4 a sum of 248 Cyzicenes together with a large sum of Attic coin to Telephonus.¹³ We have unfortunately no information of the relative value of Attic drachmai and Cyzicene staters on this occasion as the stone is broken, nothing being preserved in l. 55 but *τιμὴ τοῦτον γλ(γ)υ[εται]*.¹⁴ It is however, perhaps worth noting that if we accept the equation suggested by Professor P. Gardner of one Cyzicene with 25 drachmai we obtain nearly, but not quite, a round sum for the total payment.¹⁵ But there is no reason for regarding this as a proof of the truth of this equation, for the total need not have been a round sum. In the inscription of the same type relating to the expenditure of sacred funds disbursed by the *ταμίαι ἱερῶν χρημάτων τῆς Ἀθηναίας*¹⁶ in the years 410/9 and 407/6 B.C. there are no payments recorded except in Attic coin, but this seems exceptional, for in the year 411/10 we have more than one reference to transactions in staters, and again in 406/5. Here there are several points of interest. We have an allusion to Lampsacene staters in the record of 411/10¹⁷ and a tantalizingly mutilated reference to their value in drachmai. If we adopt the reading and restoration given in the *Corpus*¹⁸ the most important passage runs thus (l. 185, ll. 30 ff.): *Δαφσακεροί στρατῆρες . . . []ΗΗΓΞΞ . . . [ἀργύριοι τοῦτον γίγνεται] XXX*¹⁹ . . . this is followed by a somewhat similar entry, though nothing is preserved of the adjective describing the second lot of *στρατῆρες*. I think it is safe to assume that the latter are Cyzicenes, *Κυζικεροί*, and this word will form the end of l. 33. From the restoration of l. 38 we see that there were twenty-one letters to each line, and on this basis we may proceed to attempt a fuller restoration. In l. 30 we begin with a vacant space, and after *Δαφσακεροί στρατῆρες* there will be two spaces more to fill, and one at the beginning of l. 31: thus there are three figures to insert before those preserved in l. 31, and the *minimum* will be [¹⁰Η|Η] giving a total of 907+; there are fifteen spaces to fill after the last Ξ, and we may presume that the line was approximately full to the end, as *ἀργύριοι* begins a new line. As indicated in the *Corpus* the gap must be filled with the word *ἕκται* followed by some numeral written out in full, not represented by a symbol, as in l. 38 below, where we have *τέτταρες*. In this case [*Ξ ἕκται τέτταρες*] = 908 st., 4 hekts. will exactly fill the gap, and indeed any other entry would leave at least two vacant spaces, e.g. [*ΞΞ ἕκται πέντε*]. But in l. 34 we see that the

¹² *Id.* 48, 49.

¹³ *Id.* 54, 55.

¹⁴ So we should probably read the *ΑΙΑΝ* on the stone, regarding the *Α* as an error for *Α*, with the edition of the *Corpus* (cf. Dittenberger's note ad loc.).

¹⁵ 11 T. 3787 dr. 4½ obols = 1248 staters = 25 = 6200 dr. = 12 T. 3987 dr. 4½ ob., which is but little less than 12½ Talents. But

see below, where there seems evidence for a different proportion (24:1).

¹⁶ *I.G.* I. 182, 189a = *Syll.* 21.

¹⁷ *I.G.* I. 184, 185; i. Suppl. (p. 34) 184, 185.

¹⁸ Here, as throughout these notes, I use Dittenberger's system of transcription, e.g. *-* and not *oe* in the genitive singular if it is so written on the stone, and *κ* for *Η*, not for *Ε*, in inscriptions earlier than Euclides' archonship.

price is XXX^π (= 3500 +) drachmai only, which must be a number less than 4000, and this seems incredibly low for the silver value of ca. 908 staters, as it gives a proportion which cannot be far different from 4:1 as the relative values of stater and drachma.¹⁶

But it is possible to achieve a less abnormal ratio in another way. We must abandon the authority of the *Corpus* and insert the τ of γένηται at the end of l. 32, which is far from unlikely to be the case in a στοιχηδόν inscription, and restore a figure in the first space of l. 33. If we restore τ we obtain at once a *minimum* sum in silver of 1 T., 3500 dr. and consequently a ratio of ca. 10½:1 instead of 4:1; this is less unreasonable than the other, but not likely to be correct. But if we restore ^π, and make the silver total 5 T., 3500 + dr., and restore the first figure of the staters as χ and not ^π, giving them a total of ca. 1408, we come much nearer to a likely ratio. Reading the first sum as 1408 st., 4 hekts, and filling our gap in l. 32 with [^π]XXX^π[HHHΓΓΓΓ] which fits the space exactly, we find that we have exactly obtained the ratio of 24:1, for 1408½ × 24 = 33,808 which is the number of drachmai restored in l. 32. It is true that other sums between 500 and 1000 would easily fit into the gap filled as I suggest, but none of them is a multiple (of a reasonably simple type) either of the sum restored in ll. 30, 31 or of any other possible restoration of that sum.

Let us now turn to the next entry; assuming that it begins [Κυζικηνῶν] στατήρες we then have [. ἀργύ] πρὸς τοὺς γένηται . . . [ΔΤΤΤΧΧ, (then fifteen spaces) for στατήρες . . . The third, and final entry in this paragraph is thus also a sum in staters, restored in the *Corpus* as -εἰς στατήρες; but we have already had those of Lampsaenus and Cyzicus, and there is no other appropriate local adjective ending in -εῖος. Bearing in mind that there was another class of staters, those of Phocaea, current in Athens at this time,¹⁷ I would restore Φοκαίς or without hesitation. This gives us nine spaces to fill with the end of the sum in drachmai in l. 36, and we know from the figures remaining that the drachmai numbered something between 2000 and 5000, for if they had exceeded 5000 we would have had ^π after the last τ . The last three spaces at the end of the previous line require as a *minimum* [ΔΔΔ], thus the total of the drachmai was at least 43 T., 2000 + dr. Assuming the correctness of the number of talents restored in l. 35 I made some experiments with possible combinations of figures to fill the gap in l. 36, and out of a number of alternatives I found two, each divisible by 24, which fitted exactly. Moreover the corresponding number of staters in each case contained the same number of symbols, eight, which is the number required, for we have nine spaces, of which one is required for a stop, exactly as in l. 38. It is true that there is no spaced stop before ἀργύριον in the first entry, but it is there unnecessary as ἀργύ-

¹⁶ This is quite incredible in view of the other evidence for their relative values.

¹⁷ Cf. P. Garbino, 'The Gold Coinage of Asia,' *Proc. Brit. Academy*, iii, p. 18; in note 3 read

(for *C.I.A.* I, 196, 649, 660) *I.O.* (= *C.I.A.*) I, 196, ll. 649, 660. For a complete list of epigraphical allusions to these staters of Phocaea see below, p. 332, Proscript.

consisted of electrum staters, would be equivalent at 24:1 to over a million and a half of Attic drachmai (= 250 + Talents), and must have belonged to some highly important transaction and moreover indicates a plentiful circulation of non-Attic coin.

For the circulation of the Cyzicene electrum stater in the fourth century among the Greek cities of the north coast of the Euxine an inscription from Olbia²¹ may be cited with advantage. It sheds indirectly an interesting light on the problem raised in Demosthenes' speech against Phormio,²² namely, the value of the Cyzicene in Attic currency. In Olbia the value of the Cyzicene is officially fixed, in these words, by resolution of the Boule and Demos (II. 23 ff.): τὸ δὲ χρυσίον πωλεῖν καὶ ἀνεῖσθαι, τὰ μὲν στατήρα τὸν Κυζικηνὸν [ἐνδεκα]δράκην²³ ἡμιστάτηρα, καὶ μῆτε ἀξιωτέραν | μῆτε τιμιώτερον, τὸ δ' ἄλλο χρυσίον τὸ [ἐπισ]ημον ἅπαν καὶ ἀργύριον τὸ ἐπισημον | πωλεῖν καὶ ἀνεῖσθαι, ὡς ἐν ἄλλ[ήλων] | πείθωσι. It is regrettable that the exact figure for the value of the Cyzicene is not preserved, but in either case the result is interesting, for it gives us either 21 or 23 local drachmai of silver as the equivalent to the Cyzicene. Not only does the State fix the value of what was presumably the standard gold (or rather electrum) piece in use among the traders of the city, depriving them to this extent of the pleasure of bargaining over the money-changer's counter, but it expressly enacts that the purchasing value of all other coin, gold and silver alike, shall be arranged by bargaining. Thus the inscription is of interest as confirming the truth of the natural supposition that the multiplicity of coin-standards and denominations then in use was the cause of such complications that a separate bargain on each occasion was the normal solution. May we regard it as indicating that apparently Olbia had, early in the fourth century B.C., a currency of silver staters of its own, which was hitherto not known to the numismatist? Indeed, no silver coins of Olbia are attributed to an earlier date than the third century B.C.,²⁴ and these apparently are on the lighter Aeginetan standard. If there were fourth century silver staters on the same standard, the Cyzicene would be equated to either $195.45 \times 10\frac{1}{2}$ or $\times 11\frac{1}{2}$ grains (= 2041.72 or 2236.17), and these weights of silver represent just more than 30 and 33 Attic drachmai at 67.5 grains. Thus the divergence between 21½ and 28 Attic drachmai as the value of the Cyzicene mentioned in the speech against Phormio would not represent the absolute extremes possible; but perhaps at Olbia the intrinsic value of the local silver currency was below the normal standard, and this is borne out by the impure silver of the didrachm of Olbia in the British Museum.²⁵

²¹ *Inscr. Gr. Sept. Pont. Euxin* I. p. 21, No. 11 (= *Syll.* 546, = Michel, *Besait* 336). The first publication by Mastrorizzi, *Herma* xiii. p. 373, is not satisfactory for restorations of the text.

²² Cited by P. Gardner, *J.H.S.* *loc. cit.*

p. 155.

²³ Or [δωδεκα]δράκην, i.e. 10½ or 11½ staters.

²⁴ *Hist. Num.* 1 p. 272; cf. Pick, *Athen. Museum. Nordgriechenlands*, I. Pl. IX, 1, 18.

²⁵ As Professor Gardner has kindly pointed out in a letter.

2.—*Statere of Croesus in an Attic Inscription.*

The following inscribed fragment of which I took a copy and impression in the Epigraphical Museum at Athens in 1910 seems to be still unpublished. I believe it to be a portion of the building record of the chryselephantine statue in the Parthenon and to belong to the lower part of the stole on which is engraved I.G. i. Suppl. 298; moreover it is of interest to the numismatist from its allusion in ll 6, 7 to staters of Croesus, *Κροισ[αί στανά]ρες*, for the first time, to my knowledge, in a Greek inscription.

Fragment of Pentelic marble, complete only on l and behind: h. .20; br. .17; th. ca. .105. Letters 01—012 high, *στοιχηδόν*, but figures in margin not exactly in column.

ΑΛΟΛ	[Αν]αλδμ[αταδργόρ]
ΙΟΝΕΟΝ	εου:έορ[έθε.....]
ΧΡΥΣΙΣ	[...Δ]Τ χρυσίσ[υέορέθεσ]-
ΤΑΟΜΟ	[...]ΗΔ ταθμδ[υ.....]
ΔΔΠ	[Δ]ΔΔΠ ΔΔΔΔ[.....]
ΔΔΔΔ	[Ε]ΕΙ Κροισ[ειοιστατε]-
ΚΡΟΙΣ	ρεσ:ΗΔ[.....]
ΡΕΣΗΔ	τεμδ[τοδτοδ[.....]
ΤΙΜΕ	οτε...
ΟΤΕ	
ΤΧΧ	10 [Τ]ΤΧΧ

The attribution of this fragment to the stèle containing i. Suppl. 298 is based on the following grounds. (1) The thickness and general appearance of the marble.* (2) The similarity of the contents. (3) The fact that the lines begin apparently at an equal distance from the edge, though unfortunately the inscribed surface of the new fragment is destroyed by weathering for a space of about .025 from the left edge. It must however be noted that the lettering is not quite identical on both stones, and that the new fragment contains one more letter per line, excluding the figures in the margin, than the other. But these objections may be met satisfactorily by the suggestion that they are not from the record of the same year, as indeed is indicated by the contents, and that a new engraver may quite easily have inserted one more letter in each line as well as changing slightly the type of lettering.

The restoration of ll 1, 3, and 6 seems beyond doubt, and thus the number of letters (14) in each line is certain, but unfortunately it is impossible to restore with certainty any other line. L 2 was possibly left

* Note also that a similar flaw is found in the l. edge of both stones.

blank after the verb *ἐσέθη*, as it would not be necessary to state the weight of silver when the purchase was made with that metal. L. 4 must have contained the beginning of the long sum, stating the weight of the gold purchased, which continues into L. 5. We have no clue to its restoration, and, supposing the line to be full we can only conjecture the *minimum* figures which could have stood here, namely [XX^ϞHHHH^Ϟ]=2950 dr., which with the sum in L. 5 gives a *minimum* total of 2091 dr. The figures lost from L. 5 are of less importance as the total could only have been something less than forty (or ninety-) five; here again the line may not have been full to the end. In L. 7 we have a *minimum* total of 110 staters of Croesus with the certainty that the *maximum* was under 150; here again the line may not have been full. For the completion of L. 8, and the restoration of the mysterious letters QTE in L. 9 I have no suggestion, apart from the obvious one of τούτων after τιμή.

Of the figures in the margin representing the sums paid, we may be sure that the first group is to be read together, and that except in the last of the four lines there were four figures in each.²⁰ The *minimum* would be [TTT]T[HH]HΔ[Δ]ΔΔΓ[Γ]Γ=4 T., 347 dr., 1 obol, but this is probably much too low, as we have seen that the *minimum* weight of gold purchased must have been nearly $\frac{1}{2}$ T., which would cost not much less than 7 T. in silver. And, moreover, there is an indication that the last figure but one in the first line was not T but something higher, Δ rather than Γ, as the foot of the *hasta* reaches perceptibly lower than that of the upright of the T which follows it. Thus we get at once a *minimum* here of [ΔΔΔ]T=31 Talents. It is not worth while setting out all the alternatives which might stand here or in ll. 4, 5,²¹ but a point which must be emphasized is the difficulty of establishing the price paid for gold on this occasion. We see that the price paid ends in 147 dr., 1 obol, and the weight of the gold ends in a figure between 41 and 45 or 91 and 95; and on the almost certain assumption that the ratio of gold to silver in these accounts was 14:1,²² when 147 dr., 1 obol, are divided by fourteen we do not get a result at all resembling the figures preserved from the weight of the gold. Even if we regard 41(+) or 91(+) as a round sum it cannot represent $\frac{1}{4}$ of any combination of the figures in the margin, for they when so divided yield quite different results. In these circumstances there is only one solution, as far as I can see, namely, to suppose that the sum in the margin contains the price of the silver from L. 2 as well as that of the gold from ll. 4 and 5. This is not unlikely, and involves two consequences: (1) that the remainder of

²⁰ As in *I.G. I. Suppl.* 298.

²¹ The *maximum* is quite uncertain. We know that the total weight of gold on the statue was 40 talents (Thucyd. ii. 13), or 44 (Philochorus, quoted by Schol. on Aristophanes, *Peace*, l. 605), of which the purchase of rather more than six and a quarter is allotted to in *I. Suppl.* 298, ll. 14 ff.; if

the new fragment contained the record of the purchase of *all* the remainder, which is highly unlikely, the *maximum* here would be nearly 33 T., 4,500 dr. (or 37 T., 4,500 dr.).

²² See Dismore's reading and interpretation of *I.G. I. Suppl.* 298, ll. 14 ff. in the light of an entry in the building-record of the Parthenon, *A.J.A.* xvii (1913), p. 76.

l. 2 was after all occupied with the weight of the silver purchased, *σταθμῶν* being omitted; (2) that in l. 5 no figure is lost after F, and that we must complete the line *τὴν τοῦτον*, to refer to both the gold and the silver. This indeed involves the necessity of inserting an extra letter beyond the number indicated by the restored lines 1, 3, 6, but may be paralleled from l. 15 of the previously known portion of the stela.³³ As the figures in l. 2 were perhaps also crowded it does not seem to be worth while offering a conjectural restoration.

Id. 6, 7. Here we have the record of the purchase of some *Κροαίαι* (*στατῆρες* or staters of Croesus, numbering between 110 and 150. As it is uncertain whether the line was full to the end, or even overcrowded, it does not seem worth while to cite possible restorations. More interesting, but quite insoluble, is the problem of the price paid for them in silver. If I am right in restoring the marginal sum so as to consist of four figures, and in regarding it as the price paid for these staters, the total here cannot be less than [T]TXX = 2 T., 2000 dr., which as the cost of more than 110 but less than 150 staters gives us a price per stater of between 93 and 127 dr.³⁴ If, however, we suppose that here no figure is lost before the T in the margin we find that for 1 T., 2000 dr. the corresponding range of price per stater lies between 53 and 72 dr. In any case the value of the stater of Croesus in drachmal is surprisingly high, as compared, for example, with that suggested above for the staters of Iampseus and Cyzicus. But it must be remembered that unlike them it is of pure gold, not electrum, and that it was no longer in circulation, and perhaps actually scarce, especially if, as is not unlikely, much of the issue had been melted down.

What is known of the staters of Croesus from literary sources is somewhat stated. They are mentioned twice by Julius Pollux and once by Plutarch and Hesychius: the passages are as follows. Pollux iii. 87: *εὐδοκίμος δὲ καὶ ὁ Γυγάδας χρυσῆς καὶ οἱ Κροαῖοι στατῆρες*. ix. 84: *ἰσως δὲ ὀνομάτων καταλόγῳ προσήκουσιν αἱ Κροαῖοι στατῆρες καὶ Φιλιππεῖοι καὶ Δαριακοὶ*. Plutarch, *Moralia* 823 A (Teubner ed.): *Κροαίων αἰρετώτερον στατήρων*. The text of Hesychius, s.v., is incomplete, and meaningless as it stands. Thus there is no doubt that in antiquity they were regarded (1) as struck by Croesus, (2) as highly valued. Moreover we have the evidence of the coins themselves as identified by numismatists,³⁵ beyond reasonable doubt; and the fact that the gold of these staters is 'singularly pure'³⁶ may help to account for their high reputation.

That those here mentioned were of gold, not silver, is certain from the context, but it is less certain whether they are to be identified with those of

³³ Where H was cut on the stone and space to the r. of the last letter in the line above. It is not regarded by the editor of the *Corpus* as visible on the stone, but I see traces of it on a square which I made.

³⁴ 110 staters at 125-27 drachmal each cost

14,000 dr., and 150 at 93-2 dr.

³⁵ Cf. Hill, *Historical Great Coins*, p. 18; No. 7; P. Gardner, 'Gold Coinage of Asia,' pp. 9 f. and references *ad loc.*

³⁶ P. Gardner, *op. cit.*, p. 10.

the heavier or the lighter standard. In view of the high price paid it is more likely that the heavier type is in question, that weighing 168 grains (= 10.89 grammes). We have no evidence for the value of the stater of Croesus in Attic drachmai while it was still current, but it may be suggested that the heavier stater which stood in the relation of 4:3 to the lighter one of 126 grains, was worth 32 dr., or a little more. My only ground for this view is that the lighter stater was only a shade lighter than the Daric, which at a later date was regarded as equivalent to 25 Attic drachmai,²⁷ and may itself have been equated with 24; thus the heavier stater was perhaps regarded as equal to $24 \times \frac{4}{3} = 32$ dr.

We saw that the preferable restoration of the marginal sum gave 933 as the *minimum* value of these staters in drachmai in this inscription,²⁸ and thus, to put it roughly, they will have been purchased at about three times their original value, that is, if they were of the heavier standard. This may also be seen from a consideration of the relative values of gold and silver, as mentioned above. For 2 T., 2000 dr. (= 14,000 dr.) one should obtain 1000 dr. of gold (= 66,500 grains, regarding 66.5 grains as the average weight of the Attic drachma). This sum is represented by 395.83 staters at 168 grains, or roughly speaking three times the number recorded as purchased here.

For what purpose they were intended we cannot possibly say. If they were to be melted down it is surprising that the authorities paid about three times their intrinsic value for them, in addition to a purchase of raw gold. Their purity might enhance their value in the market to a small extent, but it is hard to believe that it increased it threefold. The problem must remain unsolved as far as I am concerned, but possibly a clue is to be found in the letters OTE in the last line of the stone for which I have no explanation to offer. Might they belong to the entry of some further purchase, which together with the staters accounted for the price in the margin?

3.—*The Dating of the Second Issue of Attic Gold Coins*

I am not convinced that Professor Gardner has proved his case in the matter of the epigraphic evidence for the second issue of Attic gold, which he would now attribute to 393 B.C.²⁹ and as he quotes an inscription which I have discussed in the light of a new fragment added by myself, I propose to re-examine briefly the inscriptions to which he refers. His contention that the second issue of Attic gold 'belongs to quite the early part of the fourth century' is based on the style of the coins themselves, where he follows Head in recognizing them as 'identical in style and fabric with the tetradrachms issued from 393 onwards.' Such an argument I am not competent

²⁷ P. Gardner, *J.H.S.* xxiii. (1913), p. 156.

²⁸ Assuming the *minimum* number of 130; strictly speaking 149.5 hekts is the *maximum* number.

²⁹ *J.H.S.* xxiii. (1913), p. 138. In his

earlier paper, 'The Gold Coinage of Asia,' *Proc. Acad. Lond.* iii. p. 25 he had followed Kohler in dating the second issue to 329 B.C., this being written before the appearance of his second edition of Head's *History Numism.*

to criticize, and the combined judgement of these two authorities must carry great weight; but I do not feel satisfied with the evidence from the inscriptions which Professor Gardner cites as furnishing 'a decisive proof' and 'a further proof.'²⁰

The first of these inscriptions is published in *I.G.* ii. 843, and consists of two fragments: the larger containing the remains of ten lines is practically complete on the right, the smaller, with the remains of four lines, is complete on the left. They clearly belong to the same stone, though there is no join, and apparently they are to be combined so that l. 1 of the left-hand fragment is continued on to l. 7 of the other, though the editor of the *Corpus* regards this as *minus certum*. Not having seen the stone myself I must be content with his copy, which there is no ground for distrusting. The important entry for our purpose is the letters ΑΤΗΡΑΞΑΤΤ in l. 5, which I believe to be rightly restored as [στ]ατήρας Ἀτ[ι]κός (σ for ου). We have no certain clue to the length of any line, but a length of twenty-nine letters gives a satisfactory restoration for l. 7 and an approximately correct one for l. 4. Thus I would restore ll. 3 ff.: - σο[σ]μ²¹ ἐπὶ [τῆς
..... πρυτανείας.] [- - -] τῆς πρυτανείας στατήρας
Ἀτ[ι]κός - - - - -] τῆς πρυτανείας - - - | Κεφάλαιον τὸ ξόμπαν
ἀργυρίου καὶ χρυσίου Ἀττικῶ, [χρυσίου (?), Κυζικηνῶ, χρυσίου :] | Δα-
ρειακὸν χρυσίου (?)] [ΕΤΤΙΠΗΗΠ . . .] χρυσίου Δ π[ι]στ[ε]. This is admittedly doubtful, but will serve to show the fact that the stone contains a list of payments made in various currencies, and dated by days of the prytanies of at least one tribe, for the remains of ll. 1 and 2, of which the latter seems to have contained the word [Κυζ]ικηνῶ, (case ?), belong to the record of the prytany prior to that mentioned in ll. 3, 4. The orthography and the use of the Ionic alphabet suggest the early part of the fourth century as the natural date for this inscription, and there is no reason why it should not be placed after 393 on these grounds. But its contents present a close resemblance to some of the latest payment-records of the fifth century, notably *I.G.* i. 190 + 191,²² which belongs apparently to the Attic year 406/5. It could not be placed earlier than this, for the Ionic alphabet is used here without exception, but in the other inscription cited the orthography shows a stage of transition, Η and Ω being sometimes used for Ε and Ο, but Λ not Α for *lambda*. Thus we cannot be certain that the stone under discussion does not belong to one of the closing years of the fifth century, and if this were correct we should have to regard the Attic staters of l. 4 as belonging to the first issue of gold, in 407/6. In view of this uncertainty I feel that this inscription, while proving that Attic staters were in existence and used for currency not later than the end of the first quarter of the fourth century, does not prove that they were issued rather in 393 than in 407.

²⁰ *Op. cit.* pp. 186, 187.

²¹ Could this be - χρ[υ]σ[ο]ν, the end of χρ[υ]σ[ο]ν (= χρ[υ]σ[ο]ν, participle)? I do not like to make the change, though it is not easy to restore the remains of the word as it stands.

²² See Kohler, in *Hermes* xxi. (1896), p. 148, No. 6, who adds a new fragment 15, and combines and restores these two texts; cf. E. Meyer, *Forschungen*, ii. p. 129.

The second inscription, alluded to by Köhler,⁴⁴ can be dated with much more certainty, but as the tentative restoration [στατήρ]ας χρυσίου Ἀττικῶ in ll. 24, 25 is almost certainly wrong, it furnishes no new evidence for the problem of the date of the first issue of Attic staters. Though it is impossible to restore exactly any line, we may see clearly that the last nine lines of side A contain a list of entries dated by days of the prytanies, ending with a total in the last two lines. The restoration demands a long line, perhaps between seventy and eighty letters in length, which shows that this cannot belong to the same state as the inscription previously discussed. The correct restoration of the phrase in ll. 24, 25 may be seen by comparison with l. 18. From l. 17 onwards we may restore somehow thus: -- -- --ος Μελιταί, ἐπὶ | [τῆς -- ἰδὸς (numeral) -- ης πρυτανεύουσης, -- ης τῆς πρυτανείας, χρυσίου | [Ἀττικῶ (?) -- --, ἐπὶ τῆς -- ἰδὸς (numeral) -- ης πρυτανεύουσης, μίαι καὶ τ[ριακοστὴ τῆς πρυτανείας χρυσίου (?) -- -- --, τρίται καὶ 20 τ[ριακοστὴ τῆς πρυτανείας -- -- -- ἐπὶ τῆς Λιαντίδος χρυσίου παραδόθη(?) -- -- -- ἐπὶ τῆς -- ἰδὸς -- ης πρυτανεύουσης τρίτη(?) τῆς πρυτανείας -- -- δ (or δ) δαφφῶν ἔχων ὁ | -- -- -- ης τῆς πρυτανείας χρυσίου Ἀττικῶ -- -- Κεφάλαιον τὸ ξύμπαν χρυσίου Ἀττικῶ(?) -- -- | σταθμῶν 25 XX | -- (iscent). Thus the letters ΑΞ in l. 24 are only the end of the word πρυτανείας, and therefore it is misleading to allude to this inscription in reference to staters of Attic gold, though it gives interesting evidence of frequent transactions in Attic gold. The clue to the date is given by the earlier part of this side of the stone. In ll. 2, 3, 4, 5 we have references to some silver objects, in the accusative singular, followed by ἦν, which it is natural to restore as e.g. φιάλην ἀργυρᾶν ἦν ὁ δαίνα ἀνέθηκεν; in l. 6 -- δῖο δὲ Καλ[-- ἀνέθηκεν]. In ll. 7 and 14 we have ἐκ τοῦ Παρθενῶνος,⁴⁵ and in l. 11 clearly the Ἑλληνοταμίαι are mentioned. This entry gives us the *terminus ad quem* for the date of the contents, for these officials ceased to exist after the fall of Athens in 404,⁴⁶ and the allusion to silver objects, perhaps being removed from the Parthenon (cf. ἀφαιρεθέν) in ll. 8, 14 seems to bear on the inroads made on the sacred treasure in Athens' desperate need of coin during the closing years of the war. In this connexion it seems to be a valuable supplement to the other evidence for this financial crisis, notably to the last of the records of the *traditions* of the objects in the Pronaos, *I.G.* i. 140, which records the handing over to the Hellenotamini of all the sacred objects, except one crown, which were contained in that treasury at the end of the year 407/6. Similarly *I.G.* i. 190 + 191 as restored by Köhler with his new fragment⁴⁷ seem to refer to a similar 'raid' upon the objects in the Opisthodomos.

The contents of the other side (B) of *I.G.* ii. 5, 843 b have no value in connexion with the question of Attic gold currency, and seem to be either

⁴⁴ *Z. f. N.* 1898, p. 12; the stone is *I.G.* ii. 5, 843 b.

⁴⁵ Restored in ll. 7, 8, preserved in l. 14.

⁴⁶ Cf. the mention of them in the first part (105/1) of the famous decree for the Soudans

I.G. ii. 1 (ed. min.), l. 89, where in the second part (103/2), l. 97, corresponding payments are to be made by the *ragas*; Aristotle, *Ad. Pol.* c. 10, l. 12 and note in Sandys' edition.

⁴⁷ *Hermes*, loc. cit.

an earlier part, or a continuation, of those of side A; perhaps rather the former as the appearance of the total at the end of A, followed by an un-inscribed space, suggests that it ends the year's accounts.⁴⁷

The third inscription is that to which I added a new fragment five years ago, *I.G.* ii. 665.⁴⁸ Here I think that Professor Gardner has built too elaborate a structure on the basis of my conjectural restoration. As I have already pointed out, we have here, dedicated among sacred objects, apparently in the Parthenon, some dies and small anvils for striking coin, in a case consisting of an ἀλαβαστοθήκη. The exact entry runs; ἀλαβαστοθήκη ξυλίνην ἀστατος (?) ἐν ἣν οἱ χαρακτῆρες καὶ ἀκμονόσκοι εἴσιν οἷς (?) τοὺς χρυσὸς εἰ[κοπιον], and in the corresponding passage in *I.G.* ii. 666, apparently belonging to the next year, we have nine spaces to fill, assuming the rest of the entry to be correctly restored, between οἷς and εἰκοπιον, and here I suggested τὸς χρυσὸς, instead of τοὺς χρυσὸς or τὸν χρυσὸς in il. 665.⁴⁹ Professor Gardner, accepting the restoration, justly criticises my interpretation of χρυσοί,⁵⁰ pointing out that it should strictly mean staters, and not, as I thought, all denominations of gold issued with these implements, and would refer the striking of these staters to the second issue which he assigns to 393 B.C. His reason for this dating is that no staters of the first issue are known to exist, and this he treats as equivalent to the fact that none were struck. Here I would with all due deference to his authority, suggest that the fact that no coins of a certain denomination are now known is no sure proof that none were ever struck. The instance of the discovery of a whole new series, like the fifth century staters of Melos,⁵¹ to which he himself alludes, should make us hesitate before believing that our ignorance of the existence of a coin of a particular denomination is equivalent to saying that it never existed, especially in a case where the smaller denominations of the issue in question are well known. But in any case I think that χρυσοί, if the word is rightly restored in these inscriptions, must refer to the smaller denominations as well as to the staters, for it is unlikely that the dies for the former would not have been kept together and dedicated together with those of the staters. But the chief reason for connecting these dies with those of the earlier issue is the fact that they were dedicated among the sacred objects of Athena. There is every ground for supposing, and Professor Gardner himself insists, that the second gold issue, if it is rightly dated to 393, was struck in the ordinary way of currency: thus it would not be minted from sacred objects melted down for the purpose, and consequently there would be no reason for consecrating the dies used in striking it. It is undeniable that the date of the inscription is probably later than 393, and cannot be later than 375, but failing some further discoveries in connexion

⁴⁷ The resemblance of side B to the record of payments, under *prytanes*, in *I.G.* i. 185, 186a ('Chalcidian Marble') makes me attribute both stones to the same series.

⁴⁸ *J.H.S.* xix. (1909), pp. 172 ff.; *Nouv. Chron.* 1911, pp. 251 ff.

⁴⁹ *Ann. Oxon.*, loc. cit. There is no doubt that τὸ χρυσίον would do equally well here, but it is one space too short for No. 665.

⁵⁰ *J.H.S.* xxiii. op. cit. p. 187.

⁵¹ *Op. cit.* p. 124; *Bibl. Num.* 2 p. 136.

with these records we cannot hope to establish its date for certain.²² But it is equally true that there is nothing either in the contents, the orthography, or the lettering to prevent it being proved to be earlier than 393, in which case there would be no doubt of its allusion to the striking of the first gold issue.

Thus of the two inscriptions which Professor Gardner regards as proving the issue of Attic staters (and smaller denominations) of gold in 393 I think we must conclude that the first, in which Attic staters are expressly mentioned, is on the whole just as likely to be earlier as later than 393, and possibly earlier than 400; and that the other, where a conjectural restoration alludes to χρυσοί, refers more likely than not to the issue of 407/6, and moreover, that if the restoration χρυσοί be accepted literally it can only mean that staters were struck on this occasion, as well as the other values which we already know. The third inscription, alluded to by Köhler only, belongs to about the year 403, and as it seems to make no reference to staters it does not bear on the question one way or the other. My conclusion then is that in the present state of our knowledge the evidence from these inscriptions—and I know of no others—cannot be used to support the date 393 for the issue of Attic gold coin, and though the result is negative I do not think it is altogether without interest.

k.—*The Position of Melos in 426-416.*

Misunderstanding of an inscription has led Professor Perry Gardner²³ to a false conclusion regarding the position of Melos under the Athenian Empire during the middle period of the Peloponnesian War. It is quite true that the island does not figure in the Attic Quota-lists as far as they are preserved during the thirty years beginning in 454 for which we have the quota recorded. He says 'but in the lists of 425 (*OL* 88, 4) Melos is entered as paying a tribute of 15 talents, the same as Andros and Naxos.'²⁴ He then points out the inconsistency of this epigraphical evidence with the passages in Thucydides²⁵ relating the unavailing attack on the island by Nicias in 426 (not, as he says, 427), and the fact that Melos had remained neutral up to the time of the second Athenian attack in 416. 'Few investigators,' he says, 'will hesitate to prefer the testimony of an official document to the account of the Melian controversy in Thucydides, one of the most rhetorical and the least trustworthy passages in his whole history. We may suppose that the people of Melos, in spite of their repulse of Nicias, found it impossible to remain outside the Athenian alliance, and came in in 425, to revolt again in 416, just before the Sicilian expedition.' But the inscription in question is not a fragment of the Quota-list of the year 425, of which indeed no fragments exist; it is part of the τὰς ἐς φόρον, the

²² Valuable discussions of the arrangement of the fourth century *Traditiones Berol. Synchronica* are to be found in Barnier's paper, *Athen. Mus.* 1911, pp. 38 ff., but even now the

dating of many of the fragments is uncertain.

²³ *J.H.S.* xxiii (1913), pp. 153-6.

²⁴ *Loc. cit.*

²⁵ *Il.* vii, v. 81.

resolution empowering a new assessment throughout the Athenian Empire in that year. Under this as is well known, not only was the existing assessment of most of the States raised, in some cases doubled or even trebled, but several were now assessed for the first time. Among the latter was Melos²⁶ and the fact that its tribute was made equal to that of the larger islands of Andros and Naxos reflects Athenian indignation at its successful resistance to Nicias in 426. As far as we know Melos did not pay, and we must regard this persistent refusal to enter the Athenian Empire as the reason for the heavy displeasure which Athens exhibited towards her in 416. Thus Thucydides is to be acquitted of the charge of inconsistency with an official document.

A problem which may with advantage be briefly discussed here is the reason why, on the assumption that Melos refused to pay her assessed tribute, Athens waited for practically ten years before taking steps to coerce the island. Busolt²⁷ says that the circumstances which turned Athenian attention to Melos are unknown, but a partial explanation is offered by Professor Gardner,²⁸ who points out that on the eve of the Sicilian expedition "the Athenians would have a strong objection to allowing a hostile or even a neutral island in the rear of their great fleet." If we seek rather for a reason why they waited so long, I think we shall be able to grasp the problem more successfully.

The first attack on Melos in 426 was no doubt partly due to that aspect of the policy of Demosthenes which aimed at interfering with Peloponnesian trade in the direction of Egypt,²⁹ but we should add to this the consideration of military reasons as well. The subjugation of the island would deprive Sparta of a convenient station which would, as a Dorian colony, be both useful and loyal in case of a contemplated descent on any island-subjects of Athens. After their successful opposition to the attack of Nicias, the islanders were assessed at fifteen talents; and when they refused to pay, the Athenians did not at once seek to coerce them, but turned their attention to places nearer to, and on the Peloponnesian coast, namely Cythera, Epidaurus, Lanchia, and Thyrea.³⁰ Their abstention from Melos was presumably due to an important event which happened in 425, namely the defeat of the Spartan fleet and capture of the prisoners at Sphacteria. Sparta had lost her fleet, and as now she would neither need Melos as a naval base, nor be able to send to help it if attacked, Athens saw that the island was at her mercy as soon as she could send an adequate force against it. That she still refrained from doing so was due to her troops being more seriously employed elsewhere. Their failure at Delium and at Amphipolis must, as Dr. Grundy points out,³¹ have discredited the war party, so we need not wonder that nothing was done against Melos before the peace of Nicias.

²⁶ *J.G.* i. 37, fragment 2; Busolt, *Gr. Geschichte* III. 1 p. 1119; for Melos, p. 1120, note 5.

²⁷ *Op. cit.* 1228; for the earlier expedition, pp. 1062, 1063.

²⁸ *J.H.S.* *op. cit.* p. 155.

²⁹ Grundy, *Thucydides and the History of the Age*, p. 353.

³⁰ Thucyd. iv. 56, 57.

³¹ *Op. cit.* p. 358.

After the peace Athens had at first good cause for leaving the island alone, for an attack on it would have violated the peace, and would have prejudiced Nicias' hopes of establishing friendly relations with Sparta. It was only when the breach with Sparta came, owing to the dominance of Alcibiades in Athenian affairs, that there was no reason now left for sparing Melos, and even then the expedition was postponed till after more than one force had been sent to re-establish the Athenian position in the north of the Aegean.⁶² We may now regard the coercion of Melos as a reasonable precaution in view of the Sicilian expedition, but the ruthless methods employed reflect a long pent-up resentment against the island for its refusal to enter into subjection to Athens. Though Alcibiades was not one of the strategi in charge of the force⁶³ we may regard him as to a large extent responsible for the expedition, and Plutarch's statement⁶⁴ that he was responsible for the motion to put the male inhabitants to death may well be correct.

5.—Notes on the Attic Quota-Lists.

The following corrections to the published texts of some of the later stones of this class are perhaps worth recording here, as, to the best of my knowledge, they have not been printed elsewhere.

(1) In the stele composed of the fragments *I.G.* i. 250, 261, + *i. Suppl.* 272 *d* + 272 *e*, as connected by Wilhelm,⁶⁵ it is to be noted that the right-hand edge of the slab is preserved. In l. 2 of l. 250 the engraver having no room to complete his item on the face has written the last seven letters on the right-hand edge of the stele, thus: ΜΥΡΙΝΑΙΟΙΔ/^{face} ΠΑΚΥΜΕΝ.^{edge} Similarly in l. 5 of *i. Suppl.* 272 *d* the reading is ΧΕΡΡΟΝΕ<ΙΟΙΕ, i.e. Χερρονεαίσις | (συντελής δόσαι etc.) Cavaignac⁶⁶ in discussing the stone seems to ignore the fact, stated in the *Corpus*, that the r. edge is complete (though no mention is made there of the letters on the edge of the stele), and restores Χερρονε[σσι], genitive singular, and in the next line ἀπέδοσαν [τοῦ φόρου]. But the N of the verb is under the N of Χερρονεαίσις in the line above, and thus there is only one space after it on the face of the stele: as this is blank, and there are no letters carried over on to the right-hand edge in this line, the rubric clearly ends with the word ἀπέδοσαν, which has thus no object.

(2) In the stele composed of *I.G.* i. 260, 262, + *i. Suppl.* 272 *b*,⁶⁷ it is to be noted that in 272 *b*, l. 6 the figure at the edge of the stone is ⁹⁰, not Π, and that in l. 8 opposite the name Μαδύριος is 1/4, the remains of the sign for 1 obol. Thus they paid in this year 421/0 a tribute of which the

⁶² Thucyd. v. 85; and *I.G.* i. 180, l. 9 which mentions a payment made for an expedition to Thrace early in 415/7, otherwise unknown, cf. Bittorb. *Syll.* 2 37, and note 3.

⁶³ Thucyd. v. 84, where the names Cleomedes and Teisias agree with those given in l. 25 of the inscription mentioned in the

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previous note.

⁶⁴ *Aleph.* c. 16.

⁶⁵ 'Urkunden des attischen Belahns' in *Abhandl. der phil. hist. Klasse der kais. Akad. der Wissensch.* Wien (April 28th, 1909), pp. 41 ff.

⁶⁶ *Op. cit.* p. xlvii.

⁶⁷ Wilhelm, *op. cit.*

sixtieth part ended in some fraction of a drachma. We know that the quota from their tribute was Π†††† (8½ dr.) prior to 440 B.C.²⁸ and [ΔΔΔ]†††† (33½ dr.) in 438 B.C.²⁹ but their other payments are not recorded except in the year 427/6 B.C. where ΔΔΔ† - - is, I believe, rightly restored as 33½ dr., in a fragment identified by myself,³⁰ and in 408/7 (or 407/6) - Δ · · ·, perhaps 31 dr.³¹

(3) In the stela composed of *I.G.* i. 263 *a*, 263 *b*, + i. Suppl. 272 *a*, 272 *c*, in the list of Carian States in 272 *c*, in l. 2 above [Γρ]εῖτες are the remains of a *sigma* τ, apparently the end of a short name of not more than five letters (*Ἰλαρός* or *Λέρος*.) The letters are not arranged στροιχνηδόν in this fragment, and though the ξ was placed practically over the ν in the line below it is possible that it was preceded by four letters and not three. If the latter was the case I see no means of restoring the word from any known name.

A. M. WOODWARD.

POSTSCRIPT.

The following list of entries of coins other than Attic in the Athenian 'Treasure-records' of the first half of the 4th century B.C. is, I believe, complete, and as such may be useful. In passages where restoration is less certain the references are enclosed in square brackets.

1. GOLD AND ELECTRUM.

Chalcis:—Gold staters (number uncertain), *I.G.* ii. 2, 650, l. 11; [687, l. 6].

Phocian:—(a) 2 staters, *I.G.* ii. 2, 649, ll. 8, 9; 651, ll. 5, 6; 652 *a*, l. 42; ll. 5, 652 *b*, ll. 14, 15; ll. 2, 658; ll. 2, 3; 661, l. 19.

(b) 12 hektai, immediately following (a) in the six inscriptions cited; add to these [*I.G.* ii. 2, 660 + *J.H.S.* xxix. (1909), p. 172, l. 7].

(c) 1 hektai, *I.G.* ii. 2, 649, l. 18; 652 *a*, ll. 44, 45; 661, ll. 20, 21.

(d) 3 hektai, *I.G.* ii. 2, 660, l. 44.

(e) - hektai, *I.G.* ii. 2, 666, l. 16.

(f) Uncertain, *I.G.* ii. 2, 675, l. 10; (Φεζοι - - is alone preserved).

(g) Uncertain, *I.G.* ii. 2, 704, l. 10; [708, l. 5; 709, l. 5]; [χ[ρ]ο[σ]ο[φ]ο[σ]ο] Φαυ[ρ]ο[φ]ο[σ]ο - is alone preserved; dates apparently from after 350 B.C.).

Persian Darics:—Unknown number, *I.G.* ii. 2, 661, l. 41; (χρυσὸν Δαρικῶν καὶ δηνάριον).

2. SILVER.

Argive:—2 staters, *I.G.* ii. 2, 652 *a*, l. 29; [687, l. 46].

Prelian 'Shekels':—Eleven, *I.G.* ii. 2, 649, ll. 10, 11; 651, l. 7; 652 *a*, l. 43; ll. 5, 652 *b*, l. 15; [ll. 2, 658, l. 2; 661, l. 20].

Miscellaneous:—'Foreign Silver' (Ξενοὶ ἀργυροὶ, οὐκ αὐτὸ ἀπὸ δαδῶν) weighing 83 dr., 3 obols, *I.G.* ii. 2, 698 ll. ll. 29, 30; *J.H.S.* xxix. (1909), p. 187, l. 14.

A. M. W.

²⁸ *I.G.* i. 228 (442 B.C.), no sign for their earlier payments has survived.

²⁹ *I.G.* i. 242.

³⁰ *J.H.S.* x. pp. 231, 233.

³¹ *I.G.* i. 359 (6), cf. *J.H.S.* l.c. p. 233.

SOME HELLENISTIC PORTRAITS.

1. **PTOLEMY SOTER**, the general of Alexander and founder of the Egyptian dynasty, is as well known to us numismatically as any figure in ancient history. His head appears not only on the coins of all his successors up to the time of the Roman conquest, but also on his own later issues, and therefore we have every reason to suppose that the portrait is a faithful one. On this question of verisimilitude in ancient portraits there are of course great distinctions to be drawn not only between periods but also between personages of ancient history.

Hellenistic portraits are, as a class, faithful renderings of nature, but we have still to make some reservations in comparing them with modern or with Roman likenesses. Idealism never died out of Greek art, and especially in the case of monarchs an official likeness is not always faithful in detail. This applies as much to coins as to statues or busts. Provided the coin showed an easily recognised type, there was no need to reproduce accidental details. There is a tendency in all coin-portraits to over-emphasise the distinguishing personal features and to omit the unnecessary accidentals. One might take as an instance Alexander Balas of Syria. The length of his nose and the size of his chin were the most marked features of his face, and they are reproduced on all his coins. But the exact contour of his nose was not remarkable, and it appears as aquiline on some coins and retroussé on others.¹

The coins of Ptolemy Soter differ so much between the earliest and latest Egyptian issues that, but for the intervening links, the heads would hardly appear to be the same. This is due partly to the diminishing skill of the die-cutters, but mainly to the fact that in all probability each new coin copied the last rather than went back to the original prototype. But there are certain common features in the coins of Soter which are absolutely unmistakable.² (Fig. 1, No. 1.)

The first is the high forehead, slightly bald in front, which forms a heavy projecting bar above the eyebrows; the second is the bunch of hair in front of the ear; the third the very heavy fold of flesh over the outer eye-corners.

¹ B.M. Cat. *Seleucid Kings of Syria*, Pl. XVI., XVII.; *Dallanck, Antike Porträts*, Pl. 51, Nos. 12, 23.

² B.M. Cat. *The Ptolemies*; *Symeon, 74*

epitaphia tou epistates tou Ptolemaïou; *Imhof-Schuster, Porträtköpfe ant. ägypt. Männen*, Pl. I., No. 2.

causing a sharp angle in the profile of the brow, and the fourth the strong projection of nose and chin in front of the line of the mouth. Fifthly we might add the invariably wild hair, though that is common to many Hellenistic monarchs. These are the features emphasised in all the coins, while details as to the length or shape of the nose, or the height of lip and chin, vary freely. It is these features which we must insist upon in any portrait claiming to represent Ptolemy Soter.

A number of heads are candidates for the position, as is natural considering the great importance of the subject. Some may be immediately dismissed.

(a) Bronze bust in Naples, No. 5596, called also Ptolemy Alexander, Alexander the Great, Philip, and Lysimachus of Thrace.³ (Fig. 4, No. 4.)

This head is too young for any of the known portraits of Soter, who did not assume the royal diadem till he was 62, and the lock of hair standing straight up on the forehead is a distinctive feature. The heavy neck and



FIG. 1.—HEAD IN LOUVRE, WITH COIN-PORTRAITS OF (1) PTOLEMY SOTER, (2) PHILODELPHUS AND ARSINOË II.

double chin are unlike the Soter coins, but there is sufficient resemblance about forehead, nose, and mouth to suggest relationship. We shall return to this bust again.

(b) Bronze bust in Naples, No. 5590, now usually agreed upon as Seleucus Nicator.⁴

Since Visconti's suggestion of Soter for this bust, its identity with Seleucus has practically been demonstrated. There is no resemblance to Ptolemy in any of the essential features.

³ *Six, Rom. Mus.* 1304, p. 193; *Bronzen aus Herakleum I.*, Pl. 68, 70; Conspicetti and de Petra, *Villa Eroclaneum*, Pl. IX, 2; Visconti, *Icon. Græc.* iii. p. 254; Arndt-Bruckmann, Pl. 91, 92; Wace, *J.H.S.* xxv. (1905), p. 90; *Hakler, Gr. and Roman Portraits*, Pl. 69.

⁴ Roscher, *Neue Jahrb.* 1869, p. 53; Conspicetti and de Petra, *Villa Eroclaneum*, Pl. XI; Visconti, *op. cit.* iii. p. 270; *Wolters, Rom. Mus.* 1880, p. 82; Arndt-Bruckmann, Pl. 101, 102; Wace, *J.H.S.* xxv. (1905), p. 98; *Hakler, Gr. and Roman Portraits*, Pl. 62.

(c) Marble bust in Naples, No. 6158, also called Antiochus IV. and Soter II.³

This also is a quite unwarrantable attribution. The bust shews a youth in the twenties, but he wears the diadem which Soter assumed when 62 years old. On the other hand there is considerable resemblance to Antiochus IV. Epiphanes, with whom the connexion is far more probable.

(d) Marble bust in Torlonia Palace.⁴

Compared by Arndt with c

(e) Head in Louvre.⁵ (Fig. 1.)

This head is of great importance, for it has recently been published again as Soter by Delbrück in his admirable little work *Antike Porträts*. It has also the authority of de Villafosse, Wolters, and Scheerburg, and thus is at present the accepted attribution. Mr. Wace is dissatisfied with the resemblance to the coins, but thinks it may be Soter in middle age. Now our only evidence for Soter's appearance is his coin-portrait, but one would have thought a comparison of the coins with the head was decisive at a glance. All the essential features are absent. The forehead has the heavy bar in front, which is common to most Hellenistic heads, but shews no trace of incipient baldness. On the contrary there is a fringe of short, thick locks. There is no accumulation of hair in front of the ear, and the arrangement on the head is not wild and loose, but tight and careful, rather like a lady's modern Marcel waves. These might be variants due to vagaries of fashion, but features do not change after a certain age, and we find here an absolutely straight eyebrow and a loose, rather projecting, thin-lipped mouth. The face is heavy, fat, and amiable, with enormous goggle eyes, a rather small nose and chin, and has none of the fire and energy or the keen and rather cynical glance of the first of the Ptolemies. A different identification of this head will be suggested; for the moment we may dismiss it absolutely from the possible portraits of Soter.

(f) A recently acquired fragment in Copenhagen has met with some support of late, following its publication in Arndt, especially as it comes from Egypt. (Fig. 2.)

Its claim is based on the peculiar nose. But this nose, though paralleled in some of the later and more distorted coin types, is so distinctive that, if correct, it would infallibly have been exaggerated on the coins. The coins of Soter, though they give him a heavy nose with a thick tip, usually give



FIG. 2.—HEAD IN NY-CARLSBERG, COPENHAGEN.

³ Comparetti and de Petra, *op. cit.* Pl. XXI.

⁴ Arndt-Bruckmann, Pl. 97, 99; Hekler, *op. cit.* Pl. 72 A.

⁵ Visconti, *Monumenti del Museo Torlonia*,

Pl. XI, 43.

⁷ Delbrück, *Antike Porträts*, Pl. 23; Wolters, *Rom. Mitt.* 1889, p. 33, Pl. 8; Visconti, Pl. 64 B, 5, 6.

him a perfectly straight bridge, and apart from the nose it is difficult to find any point of resemblance. The eyebrow is quite straight in profile. The chin is heavy and fat, and does not show the clear-cut profile of the coins. There is no lock of hair in front of the ear, nor is the point of the nose sufficiently drooping. The expression of the mouth is quite different. Finally one may point out that, although the head comes from Egypt, there is no sign of the royal diadem, and therefore the field for identification is considerably widened, as the head need not belong to a royal personage at all.

The portrait of Ptolemy Soter remains, therefore, an unsolved problem. There are only two heads which appear to have any real claims to represent him. One is a cast from a missing medallion⁹ in the museum of Hildesheim, shewing an elderly, stern-featured man wearing the royal tiara. Unfortunately the head is full-face and difficult to compare with the coins. But the cast came from Egypt, and most of the features of the coin-portrait are present. The other is a very mutilated head found in Thera,¹⁰ and published by Hiller von Gärtringen. So far as it can be tested it resembles the coins.



FIG. 3.—BRONZE BUST IN NAPLES AND COIN-PORTRAIT OF PTOLEMY PHILADELPHUS AND ALEXANDER II.

2. Ptolemy Philadelphus.

The field is held by Six and Rossbach's identification of the bronze bust in Naples, No. 5600¹¹ (Fig. 3). With this we can compare a large series of double coin-portraits of Philadelphus and his wife Arsinoë, some of which were issued in his lifetime, some under his successor Euergetes, and some later still.¹² We may point out a superficial similarity in the fringe and the straight line of forehead and nose. There are no other points of

⁹ Delbrück, *op. cit.* Pl. 60, No. 5; Rubensohn, *Hellenistische Silberperg.*, p. 44, Pl. VI. 32.

¹⁰ Hiller von Gärtringen, *Thera*, i. p. 245, Pl. 21.

¹¹ Compagnot and de Peiza, Pl. IX. 4;

Six, *Mon. Num.* 1902, p. 217; Hasebach, *Neue Jahrb.* 1899, p. 50; Arndt-Bruckmann, Pl. 93, 94; Waele, *J.H.S.* xxv. (1905) p. 91, Pl. VIII. 1; Heiler, *op. cit.* Pl. 78 A.

¹² B.M. Cat. *The Ptolemies*, Pl. VII.

resemblance. The *differentiae* of the coin are the huge round eye, the heavy hanging chin, the small mouth, and the peculiar hair. Particular attention must be paid to the latter, as Philadelphus is the only one of the Ptolemaic kings to wear such a *coiffure* on his coins. We have every reason, then, for supposing it an individual fad of his. The hair of the Naples bust is quite different. It lies flat on the head in natural, broad locks, a treatment resembling some Lysippic statues. Philadelphus, on the other hand, wears an elaborate arrangement of waves of quite a different appearance. Even if the *coiffure* were a passing fashion and the heavier chin a penalty of old age, we must insist on the round eye of the second Ptolemy, which disqualifies the Naples bust. In general its air of youth and somewhat ascetic vigour compares badly with the *bon vivant* Philadelphus.



FIG. 1.—PTOLEMY III. (EUEGETES).

There is, however, one head which displays all the characteristics of the coins. This is the Louvre head already disqualified as Soter. (Fig. 1.) Here, and here only, we find on coin and bust alike artificially rolled hair, a short, thick fringe, unnaturally large round eyes, a heavy hanging chin, and a small nose. The likeness is so exact between coin and bust that it is difficult to point to any discrepancies at all. The chin of the bust is perhaps rather firmer, but that is the extent of the difference. The back of the head and neck and the tip of the nose are, of course, restorations.

3. Ptolemy Euergetes (Fig. 4) is known to us from two series of coin-portraits, one from Egypt,¹² one from Asia Minor and Cyprus.¹³ The question of his likeness is complicated by the fact that there is practically no resemblance between the two. In dealing with a distinction of this kind

¹² B.M. Cat. *The Ptolemies*, II. XII.

¹³ B.M. Cat. II. IX. *Strogonow, Neuplatone von Proklos*, III. P. 27.

Svoronos would have us choose the Egyptian portrait which he calls the official type, and reject the foreign type as more fanciful.

Such an argument appears very hazardous. It is far more necessary to provide a distinctive likeness for foreigners, so that they can easily recognise the coin, than for one's own country where the coin is more familiar. Just as our stamp engravers have always kept a free hand in the designs for colonial stamps, while clinging to very conservative designs at home, so the Egyptian die-sinkers always tended to produce a more or less hieratic type complicated with insignia of various kinds at home, while the best likeness appeared abroad. Now the foreign coins of Euergetes show a very distinctive head (Nos. 1 and 2); the Egyptian coins a head of purely formal ideal appearance. In such circumstances we must take the foreign types as the basis for our investigations.

There are no strongly supported portraits of Euergetes at present, and only three can be brought forward as bearing any resemblance to the coin type.

(a) The first is the bronze bust in Naples, No. 5596,¹² which has already had so many vicissitudes (No. 4). The diadem proclaims it one of the Diadochi, and its style puts it in the second half of the third century. It has sufficient resemblance to the Ptolemies to have been labelled Soter, and is almost certainly a member of that house. There are the following points of resemblance to the coin. The head is highest exactly in the centre of the skull, and there is not much occiput; the neck is fleshy and thick; the upper lip is very short; the chin is heavy; the mouth is strong and straight with a tendency to smile; the nose is heavy and thick with a big tip and a bend in the middle; the eye is strong and keen with a heavy bar at the outer corners, in which it resembles Soter rather than Philadelphus; the hair is rough and untidy with an upstanding lock above the forehead, and it bunches out on the nape of the neck.

If we could connect the Naples bust with Egypt, we should have, I think, a strong case for Ptolemy III. The two other heads provide that connexion.

(b) M. Svoronos of Athens has in his possession the cast of a small medallion found in Egypt and now lost. I believe it to present the same type as coin and bust. It appears, however, to have no diadem. This is not necessarily fatal to its connexion with the others, for, since it is clearly younger in age, it may represent Euergetes before he came to the throne. The thick neck and hair with its prominent forehead lock and bunch on the nape of the neck are similar; so are the thick nose, heavy chin, and incipient smile. The profile is rather more hatchet-shaped, and the eyebrow is straighter. As regards the latter point, however, it must be observed that the eye is much less in profile, and consequently would have to be modified in this particular. Without feeling quite convinced about this

¹² Cf. p. 294.

medallion, I think there is some ground for connecting it with the other two types.

(c) In Copenhagen there is a fine Egyptian basalt head of a Hellenistic prince¹⁵ (No. 3), which appears to belong to the same type as these heads, although its character is very much modified by its hieratic appearance. Still a certain number of individual characteristics are permitted to appear. One is the bend in the nose which resembles the coins of Euergetes. On the other hand the bend in the eyebrow line is less clearly shewn. The face is more hatchet-shaped than the Naples bronze, though in this respect it compares with the medallion. The hair is neater, but the upstanding lock on the forehead is a valuable point of similarity. I am inclined to select the nose and the hair as Euergetes' most salient features, and therefore some importance must be given to this head for its obvious insistence on an unideal nose-form. Further points of interest are the very short upper lip and the full cheeks. Our difficulties in dealing with a head of this type are very great, because of the strongly conventional type of Egyptian Ptolemaic heads. But this is a Ptolemy and it is certainly not Ptolemy I, II, IV, V, or VI, whose coin-portraits are well known to us. Its strength and vigour, compared with what we know of the character of the later Ptolemies, tell strongly in favour of the great Euergetes, the conqueror of Asia.

4. Ptolemy IV. Philopator (Figs. 5 and 6.)

The fourth Ptolemy is a monarch whose coins present us with a face as distinctive and individual as that of Ptolemy I.¹⁶ From them we can summarise the physiognomy of this first of the degenerate Ptolemies as follows:—The head is round, the cheeks fat, and the chin slightly under-hanging. The hair is arranged in close flat curls of almost negroid type. The angle of crown and forehead is sharp, and the forehead is so vertical as to give to the front of the face an almost perpendicular profile except for the nose which projects strongly and is decidedly retronassé. The nose is the point seized upon by the die-striker as characteristic, and is therefore, on the principle suggested earlier, liable to be exaggerated in the coin. We may further notice an eye widely opened but sharply angular at the corners—not round like that of Philadelphus—and finally slight whiskers.

It is possible to recognise these distinctive marks in a head in Vienna¹⁷ (Fig. 5) now labelled as an athlete, which came from Ephesus, a town in Ptolemy Philopator's dominions, but reconquered by Syria in 197 B.C. The diadem is not that of an athlete nor is it quite the ordinary flat monarch's type; it might conceivably be that of a priest. But this thicker type of fillet is not unusual for royalty, especially no doubt where they are *ipso facto* priests like the Egyptian monarchs. Similar *Wulstbünde* for instance appear on

¹⁵ Arnal, *Les Olympiques Ny-Carlsberg*, Pl. 208.

¹⁶ B.M. Cat. *The Ptolemies*, Pl. XIV, XV; Symonds, *op. cit.*; Imhof-Blumer, *op. cit.*

p. 62, Pl. VIII, 9.

¹⁷ I am indebted to Professor Schrader for permission to publish this head.

coins bearing portraits of Seleucus¹⁰. The style of the head is third-century, and our choice is practically limited to Seleucid, Ptolemaic, or Attalid dynasts. It does not bear the slightest resemblance to any of the earlier Seleucids nor to any of the Attalid sovereigns, whose coin-portraits we possess, viz., Philétaires, Attalus, and Eumenes II. We may therefore sum up the external circumstances as far as we are able as pointing to a Ptolemy, and we can confidently exclude from the discussion the three with whom we have already dealt.

For a comparison with the coins of Philopator the loss of the end of the nose is most unfortunate, since this is the most distinguishing feature of Ptolemy's face, but there is such a remarkable correspondence in all the existing grounds for comparison that the case is strong enough even without this final proof. Thus we find the same round head, the same flat curly hair, the same thick fringe and light whiskers. The angle of the forehead too gives to the head a straight facial profile. The cheek shows the same fullness, and the profile of the eye and the mouth are practically identical.



FIG. 5.—PTOLEMY IV. (PHILOPATOR).

The lip-corners turn down with just the same semi-sneering expression, and the wide-opened eyes have markedly angular corners. There are only two divergences: the under-chin is not so heavy—a fact easily explained by the youth of the head—and the forehead shows a larger apparent bulge above the nose. It is only apparent, because a glance at the full-face serves to show that the excrescence in profile is not a real bulge of the frontal sinus, but two bony projections above the inner eye-corners separated by a deep cleft. Now this is a very distinctive feature, and it is most markedly emphasised in the coin, though in a different way. The swelling of the bone is shown, but instead of projecting forward it projects more sideways, and so does not interfere with the line of the profile. The artist is thus enabled to put more emphasis on the nose. It may be argued also that the strong resemblance of the low flat nostril and the identical shape of the upper lip show that the original nose of the bust was retrousse.

¹⁰ Delbrick, *op. cit.* Pl. 61, Nos. 15, 16; B.M. Cat. *Mon.*, 19, XXIII. No. 12.

There is already one sculptured head widely accepted as Ptolemy IV.—the head identified by Watzinger¹⁰ in the British Museum relief by Archelaos of Priene known as the Apotheosis of Homer. (Fig. 6.)

This head occurs in the lower left hand corner of the relief on a symbolic figure called *Xpónos* which is visible behind a symbolic female figure called *Oikouménē*. The two figures are engaged in crowning Homer who sits on a throne before them between his two children *Ἰλιάς* and *Ὀδυσσεύς*. The heads of the two figures certainly look more like portraits than ideal heads, and the male head wears the royal tiara. This caused Watzinger after a comparison with the coins to label him Ptolemy IV. and the female figure his wife the third Arsinoë.

This attribution I hold to be erroneous on the following grounds. The male head on the relief has a nose which makes a perfectly straight line with his forehead, and thus fails to conform to the most distinctive feature of Ptolemy Philopator. He seems further to have a heavier chin and rounder



FIG. 6.—DETAIL OF RELIEF BY ARCHELAOS OF PRIENE, WITH COIN-
PORTRAITS OF (1) PHILOPATOR, (2) ARSINOË III., (3) PHILADELPHUS
AND ARSINOË II., (4) ARSINOË II.

eye than the coin-portraits. The female figure wears a veil which is typical of the wives of Philadelphus and Euergetes, but is only found on the coins of Arsinoë III.¹¹ where she is definitely imitating Arsinoë II, the wife of Philadelphus. The length of the face and the nose correspond better with the earlier Arsinoë than with the later, who had a somewhat heavy and hatchet-shaped profile. On the other hand the male head corresponds very closely with the head of Ptolemy Philadelphus, and the crisscross cutting of the hair, though it may seem at first closer to the *coiffure* of Philopator, is a quite legitimate rendering, considering the hasty character of the carving, of the wavy hair-fashion of Philadelphus.

On *a priori* grounds it is true that Ptolemy Philopator, though not a monarch of very good reputation, is connected with Homer by the reference

¹⁰ Watzinger, 63rd *Wissenschaftliches Festprogramm*, 1903.

¹¹ *Syriacus*, *op. cit.*

in Aelian *V. H.* xiii. 22 to a temple dedicated by him to the poet. This is certainly reasonable ground for finding his portrait on this Apotheosis. But I hope to shew elsewhere that this relief belongs to a date much later than the reign of Philopator. On the other hand Ptolemy Philadelphus was the most famous of the great Hellenistic patrons of Literature, and to him was primarily due the patronage of the Homeric studies of the Museum of Alexandria. His services to Homeric study render the portrait of himself and his wife most suitable to this allegorical scene. To Philadelphus and Arsinoë I. far more justifiably than to Philopator and Arsinoë II. belong the epithets *Χρῶς* and *Οἰκουμένη*, and their two heads in juxtaposition formed the design of numerous issues of Egyptian coins.

5. Attalus I. of Pergamon. (Figs. 7 and 8.)

The coins of the Attalids are commonly said to bear in every case but one the head of Philetairos, the founder of the house, the exception being a single issue with the head of Eumenes II. Mr. Wace however published in the *Journal International d'Archéologie Numismatique* for 1903 a



FIG. 7.—ATTALUS I. OF PERGAMON.

tetradrachm of Pergamon (Fig. 7, No. 3) with a head on the obverse of a distinctly different type from the well-known Philetairos head (Fig. 7, No. 1). His arguments failed to secure recognition, though the differences seem to me patent. The head is higher and less deep than the Philetairos head, the neck is thinner and the chin lighter, the eye larger, more open, and more intense. The lip-corners droop more, and do not shew the projection of the chin typical of the founder of the dynasty. The expression is far more serious and severe. One should observe too that one coin has a thin bunch of hair on the nape of the neck, the other none. The coin belongs to the end of the reign of Attalus I., and is just earlier than the personal issue of Eumenes II. It therefore falls between the Philetairos and the Eumenes issue, and would suit Attalus I., the intervening monarch. Coming as it does after the final establishment of the independence of the Pergamene kingdom it might well bear a portrait of the great king who had brought that about, Attalus I., conqueror of the Gauls. The marble head in Naples once labelled as Attalus

and Aratus²¹ is a purely arbitrary suggestion. The marble appears to be Pergamene, but there is no royal diadem, and the sword-belt suggests a general.

Since the publication of Mr. Wace's article, a head has been found at Pergamon and transferred to the Museum of Berlin, which shews a Hellenistic monarch of the earlier Hellenistic period. This has been published as Attalus by Delbrück somewhat tentatively (Fig. 7, No. 2; Fig. 8, No. 1.)²² He appears to regard it as more than dubious whether it is not really a Seleucus owing to its resemblances to the Naples Seleucus bust. There may be a certain resemblance in the profile of these heads, but this is very largely due to the later addition of a Seleucid *coiffure* to the originally short-haired Pergamene head, shown in Figs. 7 and 8, without the later addition. In reality Seleucus' head is very long and rises at the back; the Pergamene head is short and highest in the centre. The eyes of Seleucus are short and close together; those of the Pergamene head large and wide apart. But the distinctive features of the head of Seleucus are the heavy vertical wrinkles running from nostril to chin. These are the real evidence for labelling the Naples



FIG. 3.—ATTALUS I. OF PERGAMON.

bronze Seleucus at all, since in other respects the resemblance to the coins of Seleucus is hardly conclusive. The Pergamene head shews no trace of these wrinkles, and will not bear for a moment comparison with the Seleucus coins. If it is not Seleucus, its date and finding-place point irresistibly to Attalus, and it is therefore of considerable interest to compare it with the possible Attalid portraits on the coins. Now this head could not be for a moment confused with the typical heads of Philetairos. Its broad forehead and slight chin bear no resemblance to the receding brow and jutting jaw of the first of the Attalids, but its resemblance to the coin published by Wace is immediately apparent. The profile with its remarkable swelling of the base of the forehead, its nearly vertical nose and down-turned mouth, slight chin and well-opened heavily-shadowed eye, are exactly reproduced on the coin. Although the hair and twisted wreath of the coin resemble Philetairos rather

²¹ Ocheret and Panofka, *Napels Ant. Bilden*, No. 379; Arndt-Bruckmann, Pl. 169, 117; v. Bielewski, *Darstellungen der Götter*, p. 26, Figs. 39, 40; Wace, *J.H.S.* xiv. 1903, Pl. X. 2; Heikel, *op. cit.* Pl. 78 A.

²² *Op. cit.* Pl. 27, pp. xxviii-xl.

than the Pergamene head, it is much easier to explain these differences by assimilation with the earlier types than to accept the wholly divergent head as a variant of the features of Philetairos. The head too shows the same distinctive bunch of hair on the nape of the neck.

The coin and the Pergamene head thus appear to represent indubitably the same personage, who in that case can be no other than Attalus I. I can also propose a third portrait of Attalus in a youthful head from the National Museum in Athens, published by Arndt as a young Roman of Julio-Claudian period.²² (Fig. 8, No. 2.) But the head has not the slightest resemblance to any Roman type. It is Greek and strongly affected by Scopaeic characteristics. But it is not ideal. The hair, the double wrinkle on the forehead, and the very individual mouth and cheeks leave us convinced of a portrait. The two views of this head, when compared with the original form of the Pergamene head, display the closest identity in detail combined with one most striking difference. The Athens head is that of a young man well under thirty, the Pergamene at least twenty-five years older. It will be noticed that the Attic head has no diadem, and therefore can hardly represent a reigning prince. Attalus came to the throne at the age of twenty-seven, and did not assume the royal title and diadem for a year or two later, after his defeat of the Gauls. His close connexion with Athens renders an earlier dedicated portrait of him in that city easily feasible. A detailed comparison of the two heads shows a remarkable similarity in the very individual treatment of the forehead with its double wrinkle and heavy bulge over the nose combined with a thick swelling at the outer eye- corners. Eye, nose, mouth, and chin are the same except for the greater firmness brought by age to the lips, a greater fleshiness of the underchin, and a heavier, sterner sinking of the eye. The head shape is the same, especially the profile of the back of the head. The ears show the same projection of the top, looked at from the front, and the thick dark locks of hair are not dissimilar. The younger head shows softer cheeks, lips, and eyes, and thus gives a very different first impression, but the resemblances in detail make the identity of the subjects highly probable.

6. Eumenes II. of Pergamon. (Fig. 9.)

Eumenes II. of Pergamon is known to us from a very badly preserved coin in the British Museum.²³ (No. 2.) His facial type is nearer to the receding forehead and jutting jaw of Philetairos than to his father's. The head is long and high at the back; the hair is in rather disordered curls, with slight whiskers in front of the ears; the ear lies back, and the face is hatchet-shaped with a receding forehead and a long, rather Semitic nose. The corners of the lips are tucked in, and the jaw projects strongly, coming in almost a straight line from ear to chin and ending, one would say, in a point. A head in the Roman *Magazzino Comunale*²⁴ reproduces these features fairly closely (No. 3). Unfortunately the nose, which would clinch the matter here as in

²² Arndt-Bruckmann, *Pl.* 398, 466.

²³ *B.M. Cat. Mysia*, Pl. XXIV, No. 5.

²⁴ v. Benkowski, *Darstellungen der Gallier*, pp. 24, 25, Figs. 25-28.

the case of Ptolemy IV., is broken, and restored in modern times. The general character of this head in shape, angle of setting, in hair, profile, and especially in the strong pointed jaw, immediately suggests a connexion with the coin. It shows the same projection of the occiput, the same receding forehead, the same mouth with strong dimples at the corners of the lips. The head was found in Rome, but it bears considerable general resemblance to the Pergamene statues of Gauls dedicated by Attalus. Bienkowski has for that reason associated it with the dedication of Attalus in his recent work *Die Gallier in der griechischen Kunst*, and described it as a Greek warrior. The absence of the diadem would seem at first to tell against an identification with Eumenes, but it must be remembered that Eumenes was probably well over thirty when he came to the throne. His father died at the age of seventy-two, and he was the eldest son, while the Roman head is that of a fairly young man. Though he is quite unlike his father, there is sufficient resemblance between this head and the normal type of Philetairos, especially about forehead,



FIG. 2.—EUMENES II. OF PERGAMON.

eye, mouth, and chin, to suggest a family relationship, and thus far to support the claims of the head to represent Eumenes.

No. 3 is a Roman head in the possession of Miss Talbot of Margam, S. Wales, which has always been connected with the Pergamene Gauls, though Bienkowski first pointed out its identity with the Roman head. The head is not quite a replica, but is undoubtedly the same person. In this case also the nose is restored. It is difficult, however, to agree with Bienkowski's suggestion that the heads are merely Greek warriors, for the type is a strongly individual one; the peculiar structure of the forehead above the nose, the tucked-in lip-corners, and the very pointed jaw are personal and by no means ideal features. A glance at the full face suggests a portrait. If then we have two copies of a single portrait connected with the Pergamene Gauls by common consent and distinctly of a Greek and not a Gallic type, we are surely justified in attributing it to a prominent leader on the Greek, *i.e.*, Pergamene side. Eumenes, the eldest son and heir of Attalus, appears a reasonable *a priori* suggestion, if the likeness can be borne out by the coin-portrait.

The likeness is very fairly cogent, but I must admit that I propose the attribution to Eumenes with some reserve. The fringe in the coin seems to be freer and more wavy than on the bust, and the swelling of the brow over the nose is not nearly so marked. On the other hand the general shape of the head, the hatchet-shaped profile, the pointed jaw, the eye, and the very individual mouth are strong points of resemblance.

7. Antiochus II. of Syria. (Fig. 10.)

The Seleucidae present us with far the most complete series of coin-types, since they never tended to substitute their ancestors' heads for their own in the fashion of the Ptolemies and the Attalids. So far as the coins



FIG. 10.—ANTIOCHUS II. (THEOS) OF SYRIA.

go, there is practically no controversy for the period down to Antiochus II. Theos, or after Antiochus III. called The Great. But between 261, when Antiochus II. ascended the throne, and 222, when Seleucus III. gave place to Antiochus III., there are a number of issues of Antiochus II., his sons Seleucus II. and Antiochus Hierax, and his grandson Seleucus III., on which numismatists are not entirely at one.

In particular there is a group of coin-portraits issued at Alexandria Troas which has lately been the subject of controversy.²⁷ They are distinguished from other Seleucid coins by the addition of a wing to the royal

²⁷ Maerumaid, *J.H.S.* 1903, pp. 92 foll.; A. J. B. Wace, *J.H.S.* 1905, pp. 101-2.

diadem, which is interpreted by Dr. Macdonald as a local cult sign of Alexandria Troas, since an identical obverse issued at Ilion shows the same type without the wing. But it seems unlikely that Ilion and Alexandria Troas should have shared a mint at which the Alexandrian coins had a wing added, while the Ilion coins went without. It is surely more probable that the Alexandrian coins belong to a later issue, in which the old die was used, but on which the wing was added for the purpose, in Babelon's opinion,²⁵ of emphasising the descent of the Syrian royal house through Stratonice, daughter of Demetrios Poliorcetes, with the house of Antigonos and its ancestor Perseus. Dr. Macdonald wishes to see in some of these coins portraits of Antiochus II. Theos, and in some that of his usurping successor Hierax. But a close study of the types leaves it very difficult to detect any fundamental difference, and I believe them all to represent Antiochus II.

Turning to sculpture we have two proposed renderings of Antiochus II. One is a poor Romanised Scopas athlete bust in Naples,²⁶ of which no more need be said, the other a very interesting bronze statuette of a Hellenistic personage with the attributes of Perseus.²⁷ (No. 1.) The *petasos*, or perhaps an arrangement of wings on the head, is lost, but we see the bands that fastened it and the ankle-wings. Schreiber suggested the identification with Antiochus II, and it stands the test of close comparison with the coins. The small, deeply-recessed eye, the thin, small, nervous mouth, the long, pointed nose, the rather underhanging chin, show a clear likeness to the coins which is strongly confirmed by the common Perseid attributes. Mr. Wace is certainly wrong in connecting the straps with the athletic head-dress on a head in the Capitoline Museum.

With the bronze statuette and with the coins I should like to connect another bronze head in Naples known as Gaius Caesar or a Greek warrior.²⁸ (No. 2.) The profile shows too great a resemblance for the connexion to be fortuitous. We are faced, however, with the problem that there is no diadem to prove royalty. The head is very young, one would say barely over twenty, and Antiochus Theos did not become king till the age of twenty-four. If we look at the earliest of the coin-issues (No. 3, Fig. 10), which must belong early in the reign, we see the same sensitive, rather full lips, the upper one projecting beyond the lower as in the bust. Later issues, on the other hand, and the bronze statuette hold the lips more firmly.

The Seleucids had a strong family likeness, and a good claim might be made for Seleucus II., the son of Antiochus II., on the evidence of the coins. The difficulty of the diadem would, however, be aggravated, as Seleucus II. ascended the throne about the age of twenty, if not younger.

²⁵ *Revue de Syrie*, pp. 1v. foll.

²⁶ Inv. No. 5594; Roszbach, *Neue Jahrb.* 1899, p. 55, Pl. I. 2; Furtwängler, *Masterpieces*, p. 298; Wace, *J.H.S.* xiv. (1905), p. 65.

²⁷ Hauser B.P.W.: 1903, p. 137; Schreiber, *Studien z. d. Bildnis Alexanders*, p. 272; Wace, *J.H.S.* 1905, p. 98.

²⁸ Bernoulli, *Röm. Icon.* II. p. 134.

8. Agathocles of Bactria. (Fig. 11.)

Agathocles was ruler of an Indo-Bactrian kingdom at some period during the first half of the second century B.C. He was sufficiently prominent to have earned the nickname of the Just, and his coins are well known.²¹ With these it is worth while comparing the fine portrait head in the Louvre, once called Caesar and also Antiochus III.²² The latter is an impossible suggestion for the head, since his portrait is well known on coins, and presents no point of comparison. He had a short upper lip, a protruding mouth, and a pronounced occipital development, features all of which are absent from the Louvre head. On the other hand a comparison with the coins of Agathocles shows an identity in the rather curious head-shape, which is highest at the back, and then a little flattened behind, in the short straight locks of the fringe—a detail reproduced in the other coin-types of this House such as those of Diodotus and Euthydemus II.—the flat locks above the diadem, and a very individual lock of hair starting above the temple and hanging in front



FIG. 11.—AGATHOCLES OF BACTRIA.

of the ear. We should compare also the thin horizontal forehead wrinkles, the marked wrinkle at the lip-corners, and the curved form of the brows. Though the tip of the nose is restored, it must also have been long like that on the coin, and the long flat upper lip and tightly pressed mouth are identical. We see the same short clear-cut chin, and a very remarkable similarity in the way in which the frontal *sinus* overhangs the root of the nose, making a pronounced angle. The high cheekbones and the modelling of the face are similar. Such points of resemblance can only lead to the conclusion that the same individual is represented on the coin and by the head.

²¹ A. von Saller, *Die Nachfolger Alexanders des Grossen in Baktrien und Indien*, P. Carlson, B.M. Catalogue, *The Great Kings of Bactria*

and India, Indus-Blumen, *Portraits*, Pl. VI., No. 39.

²² Arndt-Bruckmann, Nos. 103, 104.

9. Thucydides. (Fig. 12.)

Thucydides is well known to us by the Naples inscribed herm²⁸ (No. 3) and the fine head in Holkham Hall.²⁹ (No. 1.) Here we have copies of an early fourth century portrait of the great historian. Like most portraits of this date the emphasis is on the type rather than on the individual. In spite of the wrinkles and incipient baldness, neither of these heads provides a really personal likeness.

There is in the museum of Corfu a hitherto unpublished head shown between the other two (No. 2), which displays considerable similarity to the Thucydides type. Now there is one clear and obvious difference. The two well-known heads are not later than 380 B.C., while the Corfu head is certainly not earlier than 280. If, therefore, it stands comparison at all, it is a Hellenistic rendering of an earlier and more classical type.



FIG. 12.—THUCYDIDES.

In comparing the heads we see at once a general resemblance in the shape and proportions, the incipient baldness, and the character of the beard; on looking closer we find a great similarity in the shape of the eyebrows and the triangle of wrinkles above the root of the nose, the horizontal forehead wrinkles, the wave of the hair back over the ear, the oblique furrows from the nostrils, and the firm down-turned mouth. The differences are simply due to two circumstances: the man is ten or twenty years older, and the portrait is a century younger. I believe that we have in the Corfu head a new and vastly more interesting portrait of Thucydides represented by a Hellenistic artist as the old and disillusioned exile on his return after the Peloponnesian war. There is a hard restraint about the mouth and a soured look in the eyes which proclaim the man whose life has been embittered.

²⁸ Inv. No. 6239; Arndt-Bruckmann, Pl. 128, 130; Michaelis, *Jahrbuch*, 1890, p. 157; Bernoulli, *Griech. Icon.* 1, pp. 159, 160, Pl.

XVIII; Hekler, *op. cit.*, Pl. 15.

²⁹ Hekler, *op. cit.*, Pl. 17.

10. Aristotle. (Fig. 13.)

The portrait of Aristotle has been satisfactorily settled by Studniczka²² on grounds of the close resemblance between a large number of cognate heads and the inscribed bust of Aristotle once in the possession of Fulvius Ursinus. (No. 2). These heads are all due to a common archetype, and all have one further feature or absence of feature in common, namely, that the noses of all are missing or restored. I put forward a new claimant to this family with diffidence, since Studniczka has himself rejected this bust—a bronze bust from the Herculaneum Villa—as unlike the others.²³ (Nos. 6 and 8.) To me however it



FIG. 13.—ARISTOTLE.

seems not only like them but incomparably the best of them, and it has its nose intact. The points of resemblance are the hair, the fashion of the beard, the excessive width of the upper part of the head, and the shape of the straggly locks on the forehead, the straight line of the mouth with the moustache curving over it at the corners, and a sharp angle between the forehead and the top of the head. There are only two points of difference—the eyes are more deeply sunk and the mouth does not project so far nor shut in so tight a line. In general too the expression is more anxious and less calm. However, on looking at the drawing of Fulvius Ursinus' bust for what it is worth, we see that in both these points the Naples bronze is, if anything, closer to it

²² *Das Bildnis von Aristoteles*; Heider, *op. cit.* Pl. 87.

²³ Arndt-Bruckmann, Pl. 671, 672; Heider, *op. cit.* Pl. 94 B.

than the other busts. Its eyes are also deeply sunk, and its mouth is not so firmly compressed. I believe the differences again to be a matter of date. The main series of busts belong to an archetype which dates from about the same time as the Corfu head of Thucydides—about 280; the Naples bronze belongs to the later Hellenistic age with its inevitable demand for pathos and expression. The bronze bust belonged to an eminent philosopher—the owner of the Herculaneum Villa—and on *a priori* grounds one is safe in attributing considerable popularity and fame to any of the busts which he collected. The nose is a feature of some interest, as we happen to possess a description of Aristotle in which his nose is called *aquiline*.³⁷ Although the bridge of the nose in the Naples bronze is straight for most of its length, it does drop perceptibly at the tip and project in rather a beaky fashion over the upper lip. The same description calls him rather bald, bony, with small eyes, a thick beard, a small mouth and a broad chest. Studniczka, however, is undoubtedly right in suggesting that the description is largely due to Arabian imagination. The small eyes are vouched for in antiquity, and a great particularity in his *coiffure* and dress. His semi-baldness is also established and the fact that he stammered. The latter point ought to be of some importance in regard to the shape of his mouth.

GUY DICKINS.

³⁷ Cf. Studniczka, *op. cit.* p. 34.

THE HOLKHAM HEAD.—A REPLY.

IN the last number of the *Journal of Hellenic Studies* (vol. xxxiv. p. 122) Mr. Guy Dickins begins his article on the Holkham Head and the Parthenon Pediment by saying that, before accepting my own arguments as contained in my article (*J.H.S.* vol. xxxiii. p. 276), 'we have the right to demand from him [myself] some evidence on the following points:—

(1) That there is reason to connect the head with Athens and the Acropolis,

(2) That the material is identical with the other pediment marbles,

(3) That the style is Phœidian, or at any rate fifth-century Attic, and

(4) That it is an architectural and not an independent piece of sculpture.'

I will not needlessly occupy space by repeating what I have already written fully in my article, and I will merely take Mr. Dickins's four objections *seriatim* and deal with them as concisely as possible; but I must ask my readers, after they have read Mr. Dickins's exposition of his views, again to read my article carefully in order to appreciate the relative value of the evidence furnished.

(1) The first objection, which he maintains 'is hardly considered by him [me] at all,' I hold is—to anyone conversant with the general facts—fully dealt with in my article. We must remember that there can only be very few fragments of the Parthenon extant anywhere in the world, even in Greece. Since the days of Lord Elgin, beyond the fragments left on the site itself or to be found in the basements of the British Museum, about three or four larger pieces have been identified, and one of these as is generally admitted by archaeologists, namely the Weber Head, certainly came from Venice. If it is difficult for Mr. Dickins to admit the possibility and even the probability that some of the few extant fragments may be found, of all places in Italy, such was not the opinion of the late Sir Charles Newton. When in 1878 I left for a tour in Italy and Greece he especially enjoined upon me the task of hunting for fragments of the Parthenon marbles in any one of the European countries, but especially in Italy. Knowing as he did, and as we all do, that Morosini and his associates attempted to lower parts of the pedimental figures—we know in one case with what disastrous results—it was not unlikely that such fragments would have found their way into Italy.

especially to Venice. About that time I communicated to him my belief that the large fragment of the lower part of a seated draped female figure in Venice, which he had noted in *Archäologische Zeitung* of 1860, might possibly be a fragment from the Western Pediment of the Parthenon. This fragment was published by me in the *Archäologische Zeitung* of 1880 (xxxviii. p. 71 *seq.*, taf. vii.) and has been reprinted in my *Essays on the Art of Pheidias* (pp. 120 *seq.*, Plate V.). Sir Charles Newton had the cast of this fragment placed in the Elgin Room of the British Museum for comparison with the Parthenon sculptures. That it certainly illustrates the Pheidian style of the Parthenon no fair-minded archaeologist will deny. Since those days, in 1882, I identified the head of a Lapith which came from Greece in the Museum of the Louvre (*J.H.S.* vol. iii. p. 228 *seq.*, *Essays etc.*, p. 98 *seq.*, Plate L.). About the same time I discovered two fragments of smaller reproductions of the Parthenon Frieze in terracotta, the one in the Louvre, the other in the Royal Museum at Copenhagen (*Essays etc.*, p. 231 *seq.*, Plate XL.); while Mr. A. H. Smith discovered another fragment of the same series in the Museo Kircheriano at Rome (*Essays etc.*, Note F, p. 232 *seq.*, Plate XIII.). Though the late Professor Furtwängler maintained the absolute genuineness of these fragments with emphatic dogmatism, as M. Salomon Reinach with the same vehemence maintained that they were forgeries, while I still withhold my final judgment on this point, the fact remains that I was right in considering them to represent the style of the Parthenon sculptures.

In 1889, after the Greek excavations on the Acropolis, a fragment of a female head in relief was found. In this case, as in the case of the Lapith head from the Metopes, I was enabled to furnish absolute proof that the fragment in question was the head of Iris from the Eastern Frieze of the Parthenon, and the cast of this fragment can now be seen immaured in the continuous frieze in the Elgin Room at the British Museum.¹

This brief summary of the discovery of fragments from the Parthenon marbles in recent years is here given, not so much to establish for myself some claim in being capable of recognising the style of Pheidian art, but rather to show how we have reason and duty to hope that such fragments may be found in any part of the world, above all in Italy itself. Matthew Brettingham, who scoured all parts of Italy to purchase works of ancient art, would in the eighteenth century be as likely to secure such a fragment there as anywhere else in the world.

(2) Mr. Dickins is certainly right in agreeing with me that the question of the marble is of supreme importance for my contention, and I have done all in my power to settle this question. I might perhaps be allowed to suggest that before he ventured in a serious article to contradict all my statements on this important question as well, he might have seen fit to satisfy himself at least on this important point, and to have examined the marble at Holkham in its relation to the marbles in the British Museum,

¹ See *American Journal of Archaeology*, 1889, Pl. II.

though even then he would hardly be justified in expecting that his judgment would at once have over-rudden my own and that of my geological colleague, Professor McKenny Hughes. I paid three separate visits to Holkham to examine the original itself, from every point of view, and especially with regard to this important point of the nature of the marble. On the last occasion I had the great advantage of being accompanied by a specialist in geology and petrography. He had brought with him numerous specimens of the various marbles for confrontation with the head itself. Both he and I were not satisfied with the finality of our studies on the spot, and I did my best to persuade the owner to allow us to procure even the smallest chip from the back of the head, not visible to the spectator and in no way damaging to the work of art itself, in order that microscopic slides might be made for further more accurate and scientific examination of the marble. Mr. Dickins must forgive me if I remonstrate with him for seriously informing a specialist in geology of the difference in the nature of marble, even from the same quarry. This is of course known to all petrographers, and I myself have referred to this as a warning against hasty conclusions on several occasions. Nevertheless it cannot be denied that a great deal can be learnt as regards the classification of marbles from such microscopic examination; and the difference between, for instance, Pentellic and Parian, and Pentellic and nearly all the Italian marbles, is fairly recognisable. I could not prevail upon the owner of the head to give us this help towards the scientific solution of an important question. I could not even prevail upon him to allow me to have the head taken from the high niche and placed in a proper position and a proper light in order to have a really good photograph of the original made. I therefore had to remain content with a not very accurate photograph in its present unfavourable position, and for the rest had to rely upon photographs of the cast which, as regards the non-expert in such matters and even among archaeologists, are most misleading for the determination of delicate questions of style. If I failed in these attempts I need not say how impossible it was to get permission to bring the head itself to the British Museum for actual comparison on the spot with the Elgin marbles there for the light such a comparison might throw upon the question of the marble. But I must here emphatically point out the dogmatic and entirely inaccurate way in which archaeologists who compile catalogues of the various museums decide upon the question of the separate marbles. Should Mr. Dickins find it worth while to examine the original marble at Holkham, with a view to determining its relationship to the Parthenon marbles as regards material, I would warn him to remember that, not only this head at Holkham, but all the marbles in that house have, in comparatively recent years, been subject to a process of cleaning which has robbed them of their ancient *patina*, and that the appearance of the marble might therefore be very misleading to anyone applying his 'trained eye' to the determination of such delicate questions. I spent many years in the careful study of monuments in all the museums of Europe, and have seen many works issuing from the ground during excavations; but my

experience has certainly taught me one lesson: namely, extreme caution in expressing a decided opinion. As an archaeologist I shall always humbly defer to the final judgment of specialists in petrography, such as my friend and colleague, Professor McKenny Hughes.

3. That I should consider the style of this head Pheidian or fifth-century Attic, fills Mr. Dickins 'with amazement.' He goes on to say that, 'no doubt the sculptor of the pediment was not a first-class artist, but he did not at any rate commit the faults of the Holkham head.' I must confess that Mr. Dickins's opinion of the sculptor of the Parthenon pediments as a second-rate artist—or at all events not a first-class artist—will fill every archaeologist and artist with amazement. I need not repeat my reasons for assigning the Holkham head to the Attic style of the fifth century; but I must protest against all he says of the general inferiority in the modelling of this head with 'the heavy monotonous fleshy forehead, cheeks, and neck of the Holkham head,' and I would beg those interested in the question to examine the original, and not merely the cast of the head, to realise the quality of the modelling of these parts. As to the question of the lower eyelid, the edges of which are not as sharp as those of the upper lid, I could give him many instances of such differences in heads from the best period. Often (as I believe is the case in our instance) weathering or the restorer's hand in addition to this will account for such difference. It will, for instance be seen that in the well-known sepulchral relief, Hegeso wife of Proxenos (Collignon, *H.S.G.*, ii. Plate IV.), the seated female figure retains great sharpness in the cutting of the features, notably the eye-lids; while in the standing attendant female figure the features and the eye-lids have been much smoothed down in comparison. There is not a trace of the 'drilling out' of the lip corners (which he claims to see in the Holkham head) such as we find in later Roman work. He begins more definitely with the treatment of the hair, and maintains that 'the Parthenon sculptures and all the works certainly connected with the school of Pheidias show the use of thick curls of hair with a very pronounced wave.' There is no such unity in the general treatment of the hair of works belonging to the fifth century. A careful study, not only of the few heads extant in the Parthenon, but of the earlier Olympia pediments and the heads from the Argive Heraeum show a great diversity of arrangement in the treatment of the hair to conform to the several personalities presented. Some are treated in a broader manner, others with more minute variety and detail. We thus also find a very marked difference in the treatment of hair by the same artist, when Polykleitos, for instance, gives us the flat hair of the Doryphoros on a definite uniform system, and the strong variety of hue and depth in the curls of the Diadumene. To realise this variety I would ask the reader merely to turn to the second volume of Collignon's *Histoire de la Sculpture Grecque* (page 59, fig. 26) and to examine the treatment of hair of the three best preserved heads from the Frieze of the Parthenon (Poseidon, Dionysos, and Peitho) to realise the difference and the more meticulous treatment of hair strands and curls in one and the same work of the Pheidian period. Let

him turn also to the so-called Lemnian Athena from Bologna which Fortwangler attributes to Phidias to realise what varied minuteness was given in this period to the treatment of hair if the artist desired to indicate this. Let him also note the difference in the treatment of the hair between the female figures on one and the same relief, namely, the well-known Eleusinian Relief (Collignon, *H.S.G.*, ii, page 141, fig. 68). If I am right in considering the Holkham head to represent Aphrodite—and though other divinities are occasionally represented with earrings the addition of such jewels strongly favours such an interpretation—the sculptor of a pedimental group would certainly give a more ornate treatment to the hair of this figure than to any of the others. In my article I chiefly compared the treatment of the hair of this head with that of the so-called Weber head especially on Fig. 16, page 288, where, in the profile view, the sharpness of the modelling has not been rubbed away as it is in front. To appreciate the difference in the earlier and later treatment of the hair, however, one need but compare the hair of the Holkham head with that of the colossal head from Turin, figured in his article, to realise the marked difference. Mr. Dickins does compare these two heads with one another, using the full face view from the original of the Turin head and the profile view from a painfully white cast of the Holkham head. I would demand that both marbles be examined in their front view, and that it be remembered that the upper part of the hair on the Holkham head is restoration.

Mr. Dickins adduces for comparison with the Holkham head works like the Hera Ludovisi (a highly contested work on the nature of which I cannot enter here now) and the restored head of the *Giunone che discende dall'Olimpo*² of the Villa Albani. But he considers the nearest analogy to the Holkham head to be the colossal head in Turin which he figures on page 124 of his paper, Fig. 1. Now I maintain in all sobriety and without violent dogmatism or arrogance, that one could hardly find among all ancient monuments two heads more suited to illustrate contrast between two styles rather than likeness than these two heads which he considers nearest to one another. The Holkham head gives the leading characteristics of a severer art of ancient Hellas—though the subject dealt with be that of Aphrodite and not of a Hera or a Demeter, and consequently one which would be more likely to anticipate the less severe treatment of the fifth century and early fourth century B.C. which would not be the case with other divinities. The Turin head, on the other hand, illustrates the great change that set in after Scopas, and even points to a period after Lysippos and the period of Alexander the Great as a striking specimen of Hellenistic art. In the head from Turin which, to my mind, is an offshoot of the artistic direction initiated by Scopas, and passing through Lysippos to the schools of Pergamon, a late offshoot—how late I am not able to

² I have endeavoured to find reproductions of the head thus described by Mr. Dickins without further reference. I seem to remember

it as part of a relief; but without citation it is difficult to remember the many thousands of works in European museums.

determine—we have a distinct contrast in character and workmanship to the severer and earlier art of the fifth century, as illustrated in the Holkham head. I repeat: It would be difficult to find two heads so completely illustrating this contrast. The two heads are here (Fig. 1) placed side by side for comparison, the Holkham head no longer from a cast and in profile view. From the most general point of view, in attitude and expression there is a 'romanticism,' a sentiment, in the Turin head quite foreign to any heads I know which point back to the style of the fifth century *n.c.* The beginnings of such an expression and general artistic character we find in Scopasian



THE HOLKHAM HEAD.



HEAD IN TURIN.

FIG. 1.

heads and in the well-known head of Niobe in the Florentine statues preserved to us in a very inferior late Roman shop-copy. But, even in this late copy of the work which illustrates Scopasian character to us, we have a certain moderation and severity still noticeable in which the Turin head is entirely wanting. On the one hand, every feature in the whole modelling is coarsened down; and, on the other hand, there is a peculiar realism especially noticeable in the treatment of the hair. Though the hair is meant to represent the long hair of a female figure, not the longer or

shorter curls of a male figure as in the late portraits of Alexander the Great, or in the giants from the Pergamenean Altar, or the so-called Dying Alexander. The twists and twirls, the restless fluid character of these strands rising and falling on either side of the central parting, the more violent deeply cut and sharply rising ripples and waves, are most characteristic of this late sensational period. We come nearest to this style of hair in the two sea-centaurs in the Vatican,² with which I beg the reader to compare the hair of the Turin head. The hair of these sea-centaurs is Hellenistic and, though later, may be led back to the Scopasian direction of art. Both Amelung and Löwy (l.c.) recognise this. It certainly is late in character, and is contrasted with the severer style of the fifth century B.C. and with that of the Holkham head. Moreover the work is most mechanical, and it is here that the drill has been freely used when we come to the long and deep groove cut into the mass of hair that covers the ear. Though the artist is here dealing probably with some divinity, if the diadem was genuine, he would put more restraint upon himself than he would in the case of a sea-centaur; but the character and the period remain the same as in the instances quoted, which mark a late development of the Greek schools of the end of the fourth century, turning through Pergamon and Rhodes back to Roman, or at all events, flowing into the later Roman period. The same late period is shown by the strong downward curve of the eyebrow and the deeply sunk eye, as well as by the open mouth and the expression which this treatment of such features gives. It is also accentuated by the hard and mechanical line coarsely cut into the cheek beside the nostril. This more mechanical treatment can also be seen in the rigid groove cut at the angle of the mouth.

We here have an illustration of the later developments of Greek art in the strongest contrast to the spirit of Greek art in the fifth century, and this contrast cannot be better illustrated than by a comparison between the *front* views of the original Holkham head and this colossal head from Turin. If this head is the one best suited in Mr. Dickins's words 'for the real comparison for the Holkham head,' then I have nothing more to say against Mr. Dickins's strictures on my own identification of ancient sculpture as based upon the study of style.

As to the divinity to which this head belonged, I can only repeat that, if in mind we add the earrings which were certainly there, and compare in mind the relationship which this decidedly earlier type bears to the Cnidian Aphrodite, the head is more likely to be that of an Aphrodite than of any other divinity.

Mr. Dickins dismisses my arguments which tend to show that the head formed part of a pediment as based upon perspective, by asserting that the deviations I referred to in my paper are signs of 'poor workmanship,' and

² Heibig, *Führer*, etc., Nos. 185 and 179; Vatican Catalogue, II. p. 418, n. 253, T. 46, and II. p. 386, n. 228, T. 43; Löwy, *Griech.*

Kunst, p. 86, T. 101. The best illustrations are Bruno Bruckmann, *Denkmäler*, Nos. 137 and 258.

'that all heads turned to the side are liable to produce asymmetry.' I would ask the reader to examine again the heads from the Argive Heraeum as given on Figs. 17 and 18, pages 292-3, of my previous article,—still better if he would take the trouble to examine the more adequate renderings of these heads on Plates 31, 32 and 33 of Vol. I. of my *Argive Heraeum*. I would then ask the reader, whether or not the marked divergence from the straight central line of the centre of the helmet of Fig. 2 on Plate 33 and of Fig. 3 on Plate 31 is due to the gross incompetence on the part of the sculptor to fit these helmets in a straight and ordinary way (which is so easily done) and to the involuntary asymmetry which comes from the incompetence of a sculptor who could produce such excellent work as these heads undoubtedly manifest.

Finally, Mr. Dickins tells us that 'when the modern restorations of the Holkham head are removed it will be seen that the original back of the head forms a regular flat surface'; that 'the good condition of the head precludes the idea that it ever met with such damage'; and that 'marble heads do not split in regular layers with smooth surfaces.' The explanation therefore of the restorations is that 'the Holkham head was never complete, but was originally made as a mask of the same kind as the Turin head.' How can he predict what will be found when the restorations are removed; and is he aware that the restorer will generally smooth down parts which he joins together? But Mr. Dickins will allow me to be personal, and to say that I have been present on the sites of a great many excavations, besides those which I carried out myself, beginning with those at Olympia, and I can assure him that the evidence of innumerable fragments of statues and heads which I have there seen as they were dug up, having fallen from some height (namely, pediments, metopes, and friezes), shows that the marble itself split in large masses, and when it thus splits and has not fallen upon the face (but probably on the top of the head) the face may be in very good condition. The head of the Metope of Plate 30 of my *Argive Heraeum* is almost intact as regards the front of the face, while the back of the head was split off clean, but was fortunately found by us, so that we could bring the two parts together again. But more than this, I would ask him to cast even a superficial glance at Plate 17 of my article, taken from the original of the Holkham head; and he will see that the break, marking the point where the restoration of the top and back of the head was added, does not present a regular and straight line such as would have been the case had the head been presented as a mask. Moreover, the breakage at the right and the left of the neck, as well as in front, and the restorer's work (who wished to make of it a symmetrical bust to be placed upon a small pedestal) are not of the nature of those masks with which we are all familiar.

Whether I am right or not in considering it probable that the head formed part of the Parthenon pediment, so much I do claim: that even if the Holkham head be a copy, it is one of the best Greek copies, not a

late Roman shop-copy, such as are some of the other heads which I reproduced in my previous article. Moreover, it would be a copy of a type earlier than the Aphrodite type of Praxiteles and would lead us back to the fifth century B.C., which finds its fullest expression in the art of Phedias; and that this type stands in the strongest contrast to such later developments of Greek art represented by the colossal head from Turin, which Mr. Dickins considers the fittest specimen for comparison with the Holkham head.

CHARLES WALDSTEIN.

THE PROGRESS OF GREEK EPIGRAPHY, 1913-14.

THE following summary of the more important books and articles in the field of Greek Epigraphy which have been published during the year ending with the close of June 1914 continues the series of similar reviews which have appeared in the last eight issues of the *Year's Work in Classical Studies*, in which it has proved impossible, owing to pressure of material, any longer to devote a chapter annually to Greek Inscriptions. My sincere thanks are due to the Editor of this *Journal* for offering the shelter of these pages to a waif which otherwise must have come to a speedy, but I venture to hope not altogether unregretted, end.

General.—The past year has witnessed the publication of a number of works which will prove invaluable to the Greek epigraphist and historian. Of the three new volumes of the *Inscriptiones Graecae* something will be said below. To the *Sammlung der griechischen Dialekt-Inschriften*, now nearing its completion, has been added a further section,¹ edited by O. Hoffmann and P. Gärtchen, which contains the more important Ionic inscriptions published since 1905, addenda and corrigenda to those which appeared in *G.D.I.* iii. 2, 5, together with a grammar and index to the whole group. Of even greater interest is the new edition of W. Larfeld's *Griechische Epigraphik*,² revised throughout and considerably enlarged, which supersedes the earlier edition and provides all that the ordinary student can require, though even now it is only about a third as long as the author's monumental *Handbuch*: faultless the work is not, but it is no exaggeration to call it indispensable for the study with which it deals. Two more of the excellent *Kleine Texte* edited by Lietzmann come within our purview,—E. Nachmanson's *Historische griechische Inschriften*,³ containing fifty-six non-Attic texts from the seventh century down to the reign of Alexander, and F. Bleckmann's *Griechische Inschriften zur griechischen Staatenkunde*,⁴ a series of fifty-nine texts illustrative of the institutions and activities of the ancient state. The same publishers have issued a series of photographic facsimiles of 129 inscriptions of all periods, preceded by short notes, thus rendering an immense service to all students of the Greek epigraphic

¹ Bd. iv., Heft 4, Abt. 2. Göttingen (Vandenhoeck und Ruprecht), 7 M. 80.

² Munich (Beck): 10 M.

³ Bonn (Marcus und Weber): 1 M. 75.

⁴ 2 M.

script.² In this connexion may also be mentioned a brief but useful account by R. Aigrain of Christian Greek inscriptions.³

A question which is giving rise to much discussion is that of the origin of alphabetic writing and the names and order of the letters, a question which is closely connected with, even if not strictly comprised in, Greek epigraphy. H. Schneider has set out to prove the Cretan origin of the Phoenician alphabet,⁴ while E. Stucken, who has gained at least one notable convert,⁵ derives the number and order of the Phoenician letters from the twenty-two stations of the moon in the ancient Hebrew astral conception.⁶ A suggestive summary and review of these and several cognate works comes from the pen of A. Reimach;⁷ two articles on the subject not discussed by him may here be mentioned in passing, that of R. von Lichtenberg on 'Buchstabenreihe und Mythos'⁸ and that of H. Bauer, who propounds the view that the order of the letters is not based on any theoretical considerations but was determined by setting them down in the order in which they occurred in a series of common words chosen at random.⁹

A. Wilhelm continues his *Neue Beiträge*,¹⁰ the third instalment of which contains ten sections correcting and interpreting, with all the felicity and brilliance which characterizes that scholar's work, published inscriptions from Corcyra, Melaina, Salona, Argos, Sparta, Deles, Melos, Acarnania, Amorges, Miletus, Alinda and Thyssanus. A large number of articles and notes on Greek inscriptions which appeared in the *Berichte der sächsischen Gesellschaft* and the *Epigraphica Epigraphica* have been re-published in T. Mommsen's *Gesammelte Schriften*.¹¹ The admirable catalogue, edited by F. Cumont, of the sculptures and inscriptions in the *Musées Royaux du Cinquantième* at Brussels¹² includes forty-eight Greek inscriptions from Attica, Acarnania,¹³ Ithaca, Thrace and Macedon, Asia Minor, Syria, Palestine, and Egypt; fifteen of these had not previously been published,—thirteen epitaphs (Nos. 62, 67-71, 77-79, 85, 132, 142, 149), a document of Nazareth relating to the construction of a wall by a governor of Palestine (144), and a dedication to Ptolemy VI. and Cleopatra II. (146). W. Weissbrodt's publication of the inscriptions in the Braunsberg Academy I have not been able to see.¹⁴ Dialectologists will welcome J. Handel's careful account of the penetration of the *κατὰ* into Ionic inscriptions from the second half of the fifth century down to its complete triumph in the third,¹⁵ and (if versed in

² O. Kern, *Inscriptiones Graecae*, 6 M.

³ *Manuel d'Epigraphie Chrétienne*, II. *Inscriptiones Graecae*, Paris (Bloud): 1 fr. 20.

⁴ *Der testliche Ursprung des phöniciſchen Alphabets*, Leipzig (Hinrichs): 3 M. 75.

⁵ E. Bischoff, *Theol. Literaturzeit.* xxxix, 129 f.

⁶ *Der Ursprung des Alphabets und die Mondstationen*, Leipzig (Hinrichs): 7 M. 50.

⁷ *Rev. Ep.* ii, 130 ff.; cf. *Rev. Arch.* xliii, 297.

⁸ *Museum*, vii, 84 ff.

⁹ *Zeit. d. d. Morgenl. Gesell.* lxvii, 361 f.

¹⁰ *Sächs. Anz.* clxx, 1.

¹¹ vii, 1. *Epigraphische u. numismatische Schriften*, Berlin (Weidmann): 18 M.

¹² *Catalogue des Sculptures et Inscriptions antiques*,² Brussels (Vromant).

¹³ Cf. *Bibl. Wica*, clxxv, 1 p. 37 f.

¹⁴ *Griech. u. Lat. Inschriften in der archäol. Sammlung der K. Akad. zu Braunsberg*.

¹⁵ *De lingua communis in lingua Ionica scripta*, Lemberg (Galyuznits).

Ruthenian) M. Balakyn's similar work for Dorian inscriptions¹⁰; students of Greek religion will note with interest P. Stengel's article on the meaning of *προεπασθαι* and *προεργαρεύειν*,¹¹ A. Delatte's studies on Greek magic,¹² and F. S. Steinleitner's dissertation on the 'confession-inscriptions' of Lydia, Phrygia and elsewhere.¹³ Other works based largely or wholly on epigraphical materials are B. Laum's exhaustive essay on Greek and Roman benefactions,¹⁴ in which all the pertinent documents are printed *in extenso* and translated, a second and larger edition of E. Ziebarth's useful book on the organization and curriculum of Greek schools,¹⁵ A. Reinach's dating of the Athenian sculptor Niceratus in the reigns of Philaeternus and Eumenes I of Pergamum rather than about 171 B.C.,¹⁶ J. Hatzfeld's enquiry into the truth of Plutarch's narrative (*Vit. Flam.* 13) of the liberation throughout Greece of Roman and Italian slaves after the settlement of Flaminius,¹⁷ G. Klaffenbach's dissertation on the history of the gilde of Dionysiac *τεχνῖται*,¹⁸ a popular article by V. Gardthausen on inscriptions which have survived both on stone and in literature,¹⁹ a collection of *graffiti* scratched on vases in which the names of the several vases are mentioned,²⁰ M. N. Tod's article on the Greek 'acrophonic' numeral notations,²¹ and a discussion of the significance of the word *ταῦτα* as frequently used in late epitaphs, in which E. Loch maintains²² his former view that the term is used elliptically (sc. *οὗτος ἔχει, ὁ βίος ἐστίν*, or *λέγω*) against W. Havers' assertion²³ that in such cases *ταῦτα* has lost altogether its original meaning and has become equivalent to our mark of exclamation, quotation-marks or *finis*.

Attica.—The past year has brought us the first instalment of a reissue, long contemplated by the Berlin Academy, of the Attic inscriptions later than 403 B.C. It bears the title *Inscriptiones Graecae II et III editio minor* (usually cited as *I.G. II²*) and the present fascicule,²⁴ ably edited by J. Kirchner and bearing on almost every page tokens of A. Wilhelm's accuracy, erudition and generosity, contains the state-decrees of the years 403-229. The format is slightly smaller than that of the *I.G.* and the inscriptions are printed in minuscules only, but the titles prefixed to them, the greater fulness and correctness of readings and restorations, the juxtaposition of scattered fragments of the same inscription, and the fact that of the 831 texts in question 174 had not been published before, not to speak of new fragments added to many known decrees, will cause the new work to supersede for most purposes the corresponding sections of *I.G.* ii. 1 and 5. Other texts published for the first time include an interesting decree passed in 334/3 B.C. by the

¹⁰ Progr. Lemberg.

¹¹ *Hermes*, xlviii. 834 f.

¹² *B.C.H.* xxvii. 247 ff., *Musée Belge*, xvii. 321 ff., xviii. 5 ff.

¹³ *Die Götter*, Munich (Parron).

¹⁴ *Stiftungen in der griechischen u. römischen Antike*, Leipzig (Teubner): 18 M.

¹⁵ *Das latein. griech. Schulwesen*,² Leipzig (Teubner): 3 M.

¹⁶ *Mélanges Holmsteijn*, 233 ff. Paris (Picard).

¹⁷ *B.S.—VOL. XXXIV.*

¹⁸ *Ibid.* 93 ff.

¹⁹ *Symbolae ad historiam collegiorum antiquarum*, Berlin.

²⁰ *Neue Jahrb. Kl. Alt.* xxxiii. 248 ff.

²¹ P. Wolters, *Ath. Mitt.* xxviii. 193 ff., E. von Stern, *Philol.* lxxii. 346 ff.

²² *B.S.A.* xviii. 94 ff.

²³ *Insynergum. Forsch.* xxxiii. 128 ff.

²⁴ *Ibid.* xxxii. 150 ff.

²⁵ Berlin (Reimer): 47 M. 50.

deme Cholargos with reference to the banquet held at the Thesmophoria and the contributions made to it by the delegates of the demes,³³ a decree of 302 in honour of Nicon of Abydus, in which an otherwise unrecorded naval battle fought in the Hellespont just after Alexander's death is mentioned,³⁴ five fragments of official inventories,³⁵ a vase-fragment depicting an inscribed tomb erected over fallen soldiers,³⁶ a metrical dedication of an ephebe,³⁷ a fifth-century weight³⁸ and seven epitaphs.³⁹ To W. B. Dinsmoor we owe valuable discussions of the Erechthoum-inscription⁴⁰ and the accounts of the Propylaea,⁴¹ to D. Fimmen a rearrangement of the fragments of the Quotulists of 430-432,⁴² to A. Elter a new restoration and thorough re-examination of the Attic law of 353/2 relating to the Eleusinian ἀπαρχαί:⁴³ four Greek scholars have suggested solutions of a puzzling epitaph of the Peiraeus⁴⁴ and F. Eichler has attempted to determine the date of the archaic basis of Phaedimus.⁴⁵ H. Meltzer's brief article on the light thrown by inscriptions on Attic inflexions,⁴⁶ based on the results formulated by E. Wolf,⁴⁷ and A. C. Johnson's examination⁴⁸ of the epigraphical evidence for the formation of the tribe Ptolemais, which he dates in summer 232 B.C., also deserve notice.

The Peloponnese.—Of eleven epigraphical monuments in the Museum at AEGINA published by K. Kourouniotes⁴⁹ seven were previously known: three of the remainder are brief epitaphs, the fourth is a painted inscription on an altar erected to Zeus and Athena 'on behalf of King Attalus' I of Pergamum (241-197 B.C.). From ARGOS W. Vollgraff has given us, besides a number of valuable notes on published texts,⁵⁰ a new fragment, eighteen lines in length, of the famous treaty between Cnossus and Tylissus mediated by Argos about 450 B.C.⁵¹ T. Wolters explains the curious term ΑΚΟΑΙ, found in an Epidaurian inscription (*I.G.* iv. 955) and elsewhere,⁵² referring to the sounds and voices taken as χρησμοί βραυστικοί and as transferred to the place at which they were heard.⁵³ LACONIA has produced no new inscriptions, but A. Wilhelm has published a restoration and discussion of *I.G.* v. 1. 538, relating to a hitherto unknown διορθωτής Ἑλλάδος.⁵⁴ M. N. Tod has commented on a number of texts,⁵⁵ and E. Hermann⁵⁶ and

³³ E. Michon, *Un décret du démos de Cholargos*, Paris (Klatschatsch): 1 fr. 50. Cf. G. R. Acouh, *Inscr.*, 1913, 301, *Rev. Ep.* i. 390 f.

³⁴ *Ann. Joura. Arch.* xvii. 506 ff.

³⁵ *Ibid.* xviii. 1 ff., *Jahresh.* xvi. Beiblatt, 37 ff.

³⁶ P. Wolters, *Eine Darstellung des athen. Staatsfriedhofs* (Stich. München, 1913, 5).

³⁷ *Att. Mitt.* xxviii. 225 ff.

³⁸ *Arch. Anz.* xxviii. 328.

³⁹ *Rev. Ét. Anc.* ix. 264 ff., *Arch. Anz.* xxviii. 54 ff., 431 ff., 456, *Epigraph.*, 1912, 99.

⁴⁰ *Ann. Joura. Arch.* xvii. 242 ff.

⁴¹ *Ibid.* 321 ff.; cf. *Att. Mitt.* xxviii. 225 ff.

⁴² *Ibid.* 251 ff.

⁴³ *Ein athenisches Gesetz über die elementarische*

Aparche, Bonn (Marcus and Weber): 1 M.

⁴⁴ *Apex. Ep.* 1913, 103 ff.

⁴⁵ *Jahresh.* xvi. 88 ff.

⁴⁶ *Ber. phil. Week.* xxxiv. 349 ff.

⁴⁷ *Die attische Flationslehre* (Ber. d. philol. Vereins zu Berlin, 1913, 124 ff.).

⁴⁸ *Ann. Joura. Phil.* xxiv. 381 ff., xxv. 79 f.

⁴⁹ *Apex. Ep.* 1913, 86 ff.

⁵⁰ *E.G.H.* xxviii. 308 f.

⁵¹ *E.G.H.* xxviii. 279 ff., *Museumscr.* xli. 99.

⁵² *Hermes* xlix. 149 ff.

⁵³ *Stich. Berlin*, 1913, 508 ff.

⁵⁴ *J.H.S.* xxxiv. 60 ff.

⁵⁵ *Indogerm. Forsch.* xxii. 358 ff., xxiii. 493 f.

A. Thumb⁵⁷ have carried on a controversy regarding the neo-Laconian dialect exemplified in many inscriptions from the Sanctuary of Orthia: the former explains it, not as an artificial creation of a period when the genuine dialect had long died out in Sparta, but as representing the language actually spoken there at the time gradually reasserting itself against the *koine* in the first two centuries of our era, while the latter maintains that it is 'a living and natural development of the Laconian dialect on the way to the modern Tzakonian,' adopted in Sparta not from ancient books or inscriptions but from the dialect spoken at the time in the highlands of Cynuria. The volume of the *I.G.* devoted to ARCADIA⁵⁸ has been edited by F. Hiller von Gaertringen: of the 565 texts which it contains, edited with exemplary care, 118 were previously unknown, and the volume is of the utmost value to the epigraphist, the dialectologist and the historian, for whom are provided excellent summaries of the history not only of Arcadia as a whole but of each of its states individually, even those (e.g. Psophis and Aliphera) of which no inscriptions survive. Seven Arcadian documents referring to Graeco-Roman relations have been subjected to a careful and detailed examination by A. von Premerstein.⁵⁹

Central and Northern Greece.—At Mycalessus (Rhitsoma) in BOEOTIA P. N. Ure has found two epitaphs as well as a number of vase-inscriptions.⁶⁰ A. Reinach has discussed afresh the date of the alliance between Acarnania and Aetolia discovered at Thermum,⁶¹ and six epitaphs and two proxeny-decrees from Phocis have been published by C. Avezou and G. Blum.⁶² The contribution of DELPHI is of greater note. G. Colin has completed the second section of the epigraphical volume of the *Fouilles de Delphes* by a series of indexes and a chronological table of the Delphian archons therein mentioned,⁶³ and has incidentally succeeded in determining the author of the Delphic hymn composed for the Pythiad of 138 B.C., Limenius of Athens.⁶⁴ As new inscriptions we must note an alliance between the Aetolians (including a section of the Phocians) and the Boeotians, which its editor, T. Walek, assigns to about 292 B.C.⁶⁵ and a series of interesting Amphictyonic decrees, an arbitral verdict of Lamia and a grant of *proconia* to a body of mercenaries, published by H. Pomtow in connexion with his fresh discussion and table of the Delphian archons of 302-202 B.C.⁶⁶ Of texts already familiar that of the bronze charioteer,⁶⁷ those on the bases of the Agias-group,⁶⁸ and that relating to Gallio's proconsulship⁶⁹ continue to be

⁵⁷ *Rind.* xxxiii. 294 ff., 424.

⁵⁸ V. 2. Berlin (Reinisch): 40 M. 50.

⁵⁹ *Jahrbuch* xv. 197 ff.

⁶⁰ *Black Glass Pottery from Rhitsoma in Boeotia*, Oxford (H. Milford): 72, 66. net. p. 58 ff.

⁶¹ *Rev. Ep.* i. 395 f.

⁶² *B.C.H.* xxviii. 145 ff.

⁶³ III. 2. Index, Paris (Fontenaille): 12 ff.

⁶⁴ *C. R. Acad. Inscr.* 1913, 529 ff.

⁶⁵ *Rev. Philol.* xxvii. 282 ff. G. de Sanctis dates it about 280 B.C., *Atti Acad. Torino*, xlix. 694 ff.

⁶⁶ *G.R.A.* 1913, 143 ff.; cf. G. de Sanctis, *op. cit.* 689 ff.

⁶⁷ H. de Launay, *Rev. Arch.* xxi. 343 ff.

⁶⁸ F. Wolters, *Stck. München*, 1913, I. p. 40 ff.

⁶⁹ J. Oudon, *Pol. Épigr. Fond. Q.S.* 1913, 116 ff.; A. Bruns, *Rev. Bild.* x. 207 ff.

objects of discussion. THESSALY is well represented by fifteen new documents—epitaphs, dedications, manumissions and a long decree of Phalaenna (No. 16)—and notes on, or improved readings of, various published inscriptions by A. M. Woodward,⁷⁰ a painted grave-stele recently added to the Louvre,⁷¹ and further instalments of the rich finds which have rewarded the energy of A. S. Arvanitopoulos, as well as comments from his pen on already known texts⁷²; of his new discoveries three epitaphs and nine manumission-records are from Oloösön,⁷³ seventeen are from Gouni and relate for the most part to a frontier quarrel between that town and Heraclea which was settled by arbitration,⁷⁴ while a votive inscription and several painted stelae have come to light at Demetrias.⁷⁵

Islands of the Aegean.—The publications or discussions of inscriptions from Euboea,⁷⁶ Crete,⁷⁷ Thera,⁷⁸ Ios,⁷⁹ Thasos⁸⁰ and Tenedos⁸¹ do not call for detailed notice here. For DELOS, however, the year's work has been of great importance. The fourth section of the *Corpus of Delian inscriptions*,⁸² edited by P. Roussel, contains 840 texts of the period of the island's independence, very many of which appear here for the first time: 554 are decrees, chiefly of the Delian Council and People but also of foreign states, the *κοινὸν τῶν Νησιωτῶν* and other bodies, while 226 are dedications and similar documents. M. Holleaux has published a decree passed about 154 B.C. by the Cretan auxiliaries who had assisted Ptolemy VI. Philometor in his Cyprian campaign against Euergetes II. Physcon,⁸³ P. Graindier has restored a decree in honour of Telesinus of Athens,⁸⁴ and P. Roussel has given us a historical commentary on the *Senatus consultum* of 166 B.C.⁸⁵ The volume of studies dedicated to M. Holleaux by his former pupils contains much that is of value for Delian epigraphy⁸⁶; we may note R. Schulhof's article on some questions of Delian chronology (p. 281 ff.), that of R. Vallois on the Delian *πύλας* (p. 289 ff.), that of C. Avezou and C. Picard on the Palaestra and the wall of Triarius (p. 1 ff.), in which a dedication to the legate C. Valerius Triarius (69 B.C.) is first published (p. 14 ff., cf. p. 8 f.), and that of A. Plassart on the Jewish Synagogue at Delos and six brief votive inscriptions (p. 201 ff.). Not the least interesting contribution is that of P. Roussel (p. 265 ff.), on ritual regulations of the second and first centuries B.C., found on the island: three of these have here their *editio princeps*, the most striking being one relating to the cult of the Syrian Atargatis (*ἁγὴ Ἀφροδίτη*). T. Saucine has devoted an excellent monograph⁸⁷ to the geography, history and

⁷⁰ *J.H.S.* xxiii. 312 ff.

⁷¹ *Arch. Anz.* xviii. 409.

⁷² *Apex. Ep.* 1913, 191 f.

⁷³ *Rev. Ep.* ii. 17 ff.

⁷⁴ *Apex. Ep.* 1913, 35 ff.

⁷⁵ *Dpaevēd.* 1912, 186 ff., 206; cf. A. Reimb., *Rev. Ep.* ii. 126 ff.

⁷⁶ *Arch. Anz.* xviii. 458, *Dpaevēd.* 1912, 124.

⁷⁷ J. Braun, *Hermae*, xlix. 102 ff.

⁷⁸ *Rev. Ep.* i. 398, *Arch. Pops.* vi. 20 f.

⁷⁹ *Rev. Ep. Gr.* xvi. 262.

⁸⁰ *G. R. Acad. Inscr.* 1913, 360 ff., A. Reimb., *Nes Singariou*, Paris (Duclos), pp. 2, 94.

⁸¹ *Rev. Ep.* i. 179 ff.

⁸² *I.G.* xi. 4. Berlin (Reimer); 28 M.

⁸³ *Arch. Pops.* vi. 9 ff.

⁸⁴ *Musée Belge*, xviii. 97 ff.

⁸⁵ *B.C.H.* xxvii. 810 ff.

⁸⁶ *Mélanges Hollaender*; Paris (Picard).

⁸⁷ *Andros*, Vienna (Hilder).

institutions of ANIMOS: an epigraphical appendix of thirty-five pages contains twenty-one new inscriptions and a series of valuable notes on texts found in *I.G.* xii. 5 and elsewhere. From Lesbos we have to note H. Lattemann's expert examination of a Mytilenean building-inscription (*I.G.* xii. 2. 10)⁶⁸ and P. N. Papageorgin's restoration and discussion of a recently discovered treaty concluded towards the close of the third century B.C.⁶⁹ To A. Plassart and C. Picard we owe an early fourth-century cult-regulation of CHIOS, four other fragments and valuable notes on some fifteen other texts published by Zolotas in *Ἀθηνᾶ* XX,⁷⁰ to M. D. Chaviaras a series of fifty-one inscriptions, mostly epitaphs, from NISYRUS.⁷¹ A new collection of stamped amphora-handles from RHODES⁷² and a series of comments on the Lindian Chronicle⁷³ complete this portion of our review.

Asia Minor.—An inscribed stela from Daseylum representing a funeral-banquet⁷⁴ has been published by T. Maarity, and an epigraphical journey in the TROAD undertaken by A. Reinach has resulted in the discovery of ten inscriptions in the field⁷⁵ and about a score of unpublished texts from the Troad, Lampsaenus, Parium and Cyzicus in the Calvert Collection at the Dardanelles.⁷⁶ A brief account of the Pergamene police-regulations is given by F. Haverfield in his book on *Ancient Town-Planning*.⁷⁷ More important are the results acquired in AEOLIS: J. Paris has corrected the readings of several amphora-stamps from Myrina,⁷⁸ and eleven new inscriptions have been found by A. Plassart and C. Picard,⁷⁹ including a fragment of a third-century law of Cyne, while a number of stones discovered by previous explorers have been more exactly read. IONIA has yielded an extraordinarily rich and varied harvest. The two scholars last mentioned have edited seventeen new texts⁸⁰—four epitaphs from Smyrna, two from Teos, five epitaphs and a decree for a foreign city and three judges appointed by it from Colophon, three honorary inscriptions from Notium, a third-century lease from Clazomenae, and a new fragment of a well-known sacrificial list from Erythrae.⁸¹ Ephesus is represented by an account of the benefaction of Vibius Salutaris,⁸² a convincing restoration by P. Roussel of an inscription proving that the city in the day of her need sold her citizenship to replenish her exchequer,⁸³ and preliminary notices⁸⁴ of a number of epigraphic discoveries made during the Ephesian excavations of 1907-12. Of less general interest is I. Lévy's note on a Prienian inscription,⁸⁵ but on the other hand the volume which contains the official account of the Milesian

⁶⁸ *Rev. Ep.* ii. 1 ff.

⁶⁹ *Ἰστορία καὶ ἀνέκδοτα τῶν ἐπιγραφῶν τοῦ ν. γ. αἰῶνος ἐνταυτοῦ τοῦ Ἐπιστ. Λόπιου (Touhnet)* 60 pp.

⁷⁰ *B.C.H.* xxxvii. 193 ff., 448.

⁷¹ *Ἀρχ. Ἐπ.* 1913, 8 ff., 108.

⁷² *Melanges Helléniques*, 153 ff.

⁷³ *Berl. phil. Week.* xxxiii. 1371 ff., 1416 ff., *Rev. Ep.* i. 397 f., *Arch. Rd.* xvi. 634.

⁷⁴ *B.C.H.* xxxvii. 358.

⁷⁵ *Rev. Ep.* i. 290 ff., ii. 85 ff.

⁷⁶ *Ibid.* i. 165 ff.

⁷⁷ P. 63 f. Cf. H. Lamm, *Neue Jahrb.* xl. *Alt.* xxi. 622 ff.

⁷⁸ *Rev. Ep.* i. 376 ff.

⁷⁹ *B.C.H.* xxxvii. 155 ff., 448.

⁸⁰ *Ibid.* 183 ff., 449 f.

⁸¹ *Ibid.* 449.

⁸² A. Reinach, *Rev. Ep.* i. 227 ff.

⁸³ *Rev. Philol.* xxxvii. 332 ff.

⁸⁴ *Jahrbuch.* xv. Beiblatt, 157 ff.

⁸⁵ *Rev. Ep.* i. 251 ff.

*Delphinium*¹⁰⁸ stands out as one of the most important works of recent years. It contains 159 inscriptions, of which only five have been previously published, notably the famous regulation of the *δρῦα* of the *μολπῶι* (No. 133), the decree accepting Eudemus' benefaction to the Milesian schools (145) and the bilingual dedication, Nabataean and Greek, of Syllaenus (165). I cannot in the short space at my disposal refer, however summarily, to all the documents of interest contained in this collection, which includes several archaic inscriptions written boustrophedon,—a sixth-century sacrificial calendar (31, cf. 31*, p. 401), the dedication of an altar to Hecate (129) and a cult-regulation (132),—eleven treaties concluded by Miletus in the fourth, third and early second centuries (135 ff.) and two important records of state loans (138, 147). But the most valuable group is that comprising seven lists (122-8) of the eponymous magistrates, the *στεφανοφόροι* or *μολπῶν αἰσυροφῆται*, affording a continuous catalogue from 525 to 260, from 232 to 184 and again from 89 B.C. to 31 A.D. A striking fact is the frequency with which Apollo was called upon to act as titular *stephanophoros*,—twenty-three times in the 120 years between 330 and 184 B.C. which are covered by this document,—probably because his treasury was better able than private purses to meet the expenditure involved in the office. U. von Wilamowitz's brilliant sketch of Milesian history¹⁰⁹ and his and A. Rehm's¹¹⁰ corrections of several texts in the volume just referred to should be noticed, as also H. Grégoire's interpretation of *C.I.G.* 2883¹¹¹ as an answer made by the oracle of Branchidae to Diocletian and his colleagues an answer which led to the persecutions of the Christians.¹¹² Turning to *LYDIA* we must notice two further instalments of the publication by W. H. Buckler and D. M. Robinson of the Greek inscriptions found at Sardis¹¹³; four of these (Nos. 4-7), comprising in all seven texts, are in honour of priestesses of Artemis, who bear the native title of *καίτες*, one is a list, probably of newly enrolled citizens (No. 8), and fifteen are epitaphs, including one (20) which, dating from about 450 B.C., is the earliest Greek inscription hitherto found at Sardis. The Lydian local and personal names found in this series of texts have been carefully examined by A. Cuny.¹¹⁴ To W. H. Buckler we owe also a batch of twenty-one inscriptions of Thyatira, of which only two (16, 21) were already known, comprising sixteen honorary inscriptions of the Imperial period, a milestone bearing a title of Gratian, Valentinian and Theodosius, and four epitaphs.¹¹⁵ *CARIA* too is well represented by a fragment of the dedication of the *Thermae* at Aphrodisias,¹¹⁶ a summary of the known inscriptions of Nysa ad Maeandrum and the reconstruction, by the aid of a newly found fragment of a long inscription of that town including letters from Seleucus and Antiochus the Great relating to the rights of *ἀστυλία* enjoyed by the

¹⁰⁸ G. Kawerau and A. Rehm, *Milet.* (B.), [2] *Das Delphinium*, Berlin (Reimer), 22 M. 50.

¹⁰⁹ *O.G.A.* 1914, 65 ff.

¹¹⁰ *Hermet.* xlix, 314 ff.

¹¹¹ *Mélanges Hollandaux*, p. 81 ff.

¹¹² *Ann. Assoc. Arch.* xvii, 353 ff., xviii, 353 ff.

¹¹³ *Rev. Et. Anc.* xv, 299 ff.

¹¹⁴ *Rev. Philol.* xxxvii, 339 ff.

¹¹⁵ *G. R. Acad. Inscr.*, 1914, 49 ff.

Plutonium there,¹¹⁴ forty-one texts, mainly votive and sepulchral, from the Cuidian peninsula and the Rhodian Peraea,¹¹⁵ a discussion of the native Carian inscriptions by A. Cuny,¹¹⁶ and a republication by H. A. Ormerod¹¹⁷ of the famous Halicarnassian list of priests (Dittenb. *Syll.* 608) and of an imperfectly known honorary inscription from Xanthus in LYCIA, both of which are now in the Museum of the Liverpool Royal Institution. A Lycian journey undertaken by the same scholar and E. S. G. Robinson has resulted in the discovery of fifty new texts,¹¹⁸ including three gravestones of considerable interest (Nos. 10, 13, 26) and a fragment in the native language (29). The dedications of a group of third or fourth century reliefs of Lycia have been examined by O. Weinreich¹¹⁹ and S. Reinach.¹²⁰ J. Sundwall has shown¹²¹ that an inscription from Andeda in PISIDIA recently published by Woodward¹²² refers to an otherwise unknown proconsul of Lycia and Pamphylia named Vindicianus, probably the grandfather of the Avianus Vindicianus known from a number of epigraphical documents. In his article entitled *Sketches in the Religious Antiquities of Asia Minor*¹²³ W. M. Ramsay makes constant use of inscriptions, of which he gives in several cases new and corrected readings, and publishes three from the sanctuary of Men Askaēnos near Antioch and the neighbouring district, including a fragment of the Tekmoreum lists giving as a definite date, A.D. 238. A full and interesting account of the cult and festivals of this Men comes from the pen of J. G. C. Anderson,¹²⁴ who publishes twenty-seven inscriptions, the majority of which are records of victories won at these festivals, notably in the *ἀγὼν Μαῆσιμῆεος* founded by a certain C. Ulpius Baebianus (for an epigraphical account of its institution see No. 11) in honour of Galerius, an embittered persecutor of Christianity: 'the sanctuary of Men at Karakuyu is thus proved to have been one of the centres of pagan revival during the early decades of the fourth century.' G. L. Cheesman in discussing the influential Antiochene family of the Caristarii¹²⁵ gives a revised reading and restoration of a Greek honorary inscription, with a detailed commentary, by W. M. Ramsay. Otherwise we have only to mention A. Reinach's note on the Meter Kouadatrene of a Lycæonian text¹²⁶ and J. Peristianes' publication¹²⁷ of a Greek dedication in the native syllabary from Cerynus in CYPRUS.

Outlying Regions.—SARDINIA has given us a metrical epitaph,¹²⁸ SICILY fourteen minor inscriptions, chiefly sepulchral, from Syracuse,¹²⁹ and

¹¹⁴ W. von Dient, *Spica ad Musæum*, Berlin (Reimer), 14 M. Pp. 7 ff., 82 ff.

¹¹⁵ *Arch. Ep.* 1913, 1 ff., 17, 162 ff., *Ann. Journ.* Phil. xxiv. 451 ff.

¹¹⁶ *Rev. Ep.* Aug. xvi. 41 ff.

¹¹⁷ *Liverpool Annals*, vi. 60 ff.

¹¹⁸ *J.H.S.* xxv. 1 ff.

¹¹⁹ *Arch. Heidelberg*, 1913, V.

¹²⁰ *Rev. Arch.* xii. 279 ff.

¹²¹ *Jahrb.* xv. Helttatt, 273 ff.

¹²² *B.S.A.* xvi. 179 f.

¹²³ *Bull.* xviii. 37 ff.; cf. A. Reinach, *Rev. Ep.* ii. 154 ff.

¹²⁴ *J.H.S.* iii. 267 ff.

¹²⁵ *Ibid.* 233 ff.

¹²⁶ *Rev. Ep.* l. 393 f.

¹²⁷ *J.H.S.* xxiv. 110 ff.

¹²⁸ *Notulae*, 1913, 99, 423.

¹²⁹ *Ibid.* 293 ff.

explanations by H. Diels¹³⁰ and A. Brinkmann¹³¹ of the schoolboy's jests found last year at Aidone, ITALY a *defixio* from a Calabrian tomb¹³² and a number of epitaphs, *graffiti*, etc., chiefly from Ostia and Pompeii;¹³³ we may also note the discovery of an epigraphical MS. at Lucca,¹³⁴ fresh discussions by A. Reinach¹³⁵ and A. Mauri¹³⁶ of the bilingual Neapolitan inscription of 194 B.C. recording the honours paid by the *φρατρία* of Artemis to a benefactor and his letter of acknowledgement, a re-examination of the date of the picture from Herculaneum signed by Alexander of Athens,¹³⁷ and a note on the synagogues mentioned in the inscriptions of the Jewish catacombs of Monteverde.¹³⁸ A. M. Woodward has published¹³⁹ thirty-two new inscriptions from Beroea in MACEDONIA, of which three letters of Demetrius (No. 1) and a munimission record (2) are the most interesting, and corrections of twelve texts of the same town and an important decree of Dranië;¹⁴⁰ he and A. J. B. Wace have also given us eleven new Greek texts from Upper Macedonia.¹⁴¹ We owe thirty-three inscriptions of Thessalonica to C. Avezon and C. Picard, including a mutilated rescript of M. Aurelius and L. Verus (No. 2), four dedications and twenty-six epitaphs of the Imperial period.¹⁴² The other finds made in this region are of lesser importance,¹⁴³ while of works of a more general character I need only refer to W. D. Ferguson's examination of the legal terms which occur alike in the Macedonian inscriptions and in the New Testament¹⁴⁴ and to W. Baëge's dissertation on the religious rites of the Macedonians.¹⁴⁵ We may turn next to THRACE and the lands bordering the Danube. Avezon and Picard have discovered ten unpublished inscriptions of Abdera, five of Maronea and two of Trajanopolis ad Hebrum, one of which records interesting details of road-repairs carried out by certain villages under Septimius Severus.¹⁴⁶ The first native Thracian text to come to light has been edited by P. Kruschmer,¹⁴⁷ and G. Seure continues his investigations of Thracian antiquities by discussing eight ex-votos and epitaphs¹⁴⁸ which are 'unedited or little known,' as well as a puzzling weight found near Selymbria¹⁴⁹ and the seven extant dedications to the Thracian deity Zbelourdes,¹⁵⁰ for whose cult G. Kazarow adds several new pieces of epigraphical evidence.¹⁵¹ A. Reinach's contributions to Thracian studies¹⁵²

¹³⁰ *Stab. Berlin*, 1913, 515 ff.

¹³¹ *Rh. Mus.* lxxviii, 639 f.

¹³² *Notulae*, 1913, 317 f.

¹³³ *Notulae*, 1913, 185, 192, 213, 222, *Rev. Ep.* l. 462; cf. *Bull. Comm. Arch.* xii, 63.

¹³⁴ *Rev. Ep.* l. 492 f.

¹³⁵ *Ibid.* 239 ff.

¹³⁶ *Studi Romani*, 1913, 21 ff.

¹³⁷ *Rev. Ep.* li, 117 ff.; cf. *Arch. Suz.* xviii, 65 ff.

¹³⁸ J. Oxford, *Fid. Expl. Fund. Q.S.* 1914, 42.

¹³⁹ *B.S.A.* xviii, 133 ff.

¹⁴⁰ *J.H.S.* xxviii, 397 ff.

¹⁴¹ *B.S.A.* xviii, 168 ff.

¹⁴² *B.C.H.* xxviii, 84 ff.

¹⁴³ *Arch. Suz.* xviii, 463, *Epigraph.* 1912, 240 ff.; cf. *Arch. Suz.* xxviii, 224.

¹⁴⁴ *The Legal Terms common to the Macedonian Inscriptions and the N.T.*, Cambridge (Univ. Press); 2s. net.

¹⁴⁵ *De Macedonum ritibus*, Halle (Neisner); 7 M.

¹⁴⁶ *B.C.H.* xxviii, 117 ff., 447.

¹⁴⁷ *Glossa*, vi, 74 ff.

¹⁴⁸ *Rev. Arch.* xii, 225 ff.

¹⁴⁹ *Ibid.* 250.

¹⁵⁰ *Rev. Ep. Gr.* xvi, 225 ff., *Rev. Ep.* l. 495 f.

¹⁵¹ *Rev. Arch.* xxi, 240 ff.

¹⁵² *Rev. Ep.* l. 399, 405; li, 158.

and N. Vulić's discovery in Servia of three further Greek inscriptions¹²³ must not be overlooked. A golden phiale recently found in the tomb of a Scythian king in southern Russia bears a Greek inscription published by A. Bohrmansky¹²⁴ and an important correction has been made by B. Latyschev in a Bosphoran text:¹²⁵ of far greater note, however, is the appearance of a masterly work on Scythia and the Greek cities of the Scythian coast by E. H. Mims,¹²⁶ who in an epigraphical appendix (p. 639 ff.) prints in full the texts of seventy-two Greek inscriptions found in, or important for the history of, the district in question, besides referring constantly throughout the work to this class of evidence.¹²⁷ The most important finds from SYRIA, including Palestine, are those made at Bosra,¹²⁸ where the members of the Princeton University Expedition copied twenty-three Latin and sixty-five Greek inscriptions, of which latter twenty-seven are republished, often with valuable corrections, while thirty-eight are new. A number of Greek and Jewish names from tombs near Jerusalem,¹²⁹ a new epitaph from the Decapolis¹³⁰ and a group of texts copied east of the Jordan by G. Dalman¹³¹ should also be noticed,¹³² as well as J. Offord's note on Lysanias, tetrarch of Abilene,¹³³ E. Schwyzler's correction¹³⁴ of the Nebi Abel inscription (Dittenb. *O.G.I.* 606) and F. Bleckmann's useful summary of the Greek and Latin inscriptions from Palestine published in 1910-12.¹³⁵ Of Egypt and Nubia I need not speak, since it would be idle to recapitulate here the Bibliography which is to appear annually in the recently founded *Journal of Egyptian Archaeology*.¹³⁶ No fewer than a hundred new Greek texts from the CYRENAICA, mostly collected by the late H. F. De Cou, have been edited by D. M. Robinson,¹³⁷ together with numerous corrections of inscriptions which appeared in the *C.I.G.*, while from the fifth catacomb at Hadrumetum a Christian epitaph of an immigrant from Smyrna has come to light.¹³⁸

MARCUS N. TOD.

¹²³ *Jahresh.* xv. Beiblatt, 215 ff.

¹²⁴ *Rev. Arch.* xliii. 181 ff., cf. 183, 188 f.

¹²⁵ *Berk. phil. Week.* xxiv. 768.

¹²⁶ *Scythians and Greeks*, Cambridge (Univ. Press), 63s.

¹²⁷ *Es.* pp. 300 ff., 358 ff., 429, 466.

¹²⁸ *Princeton Univ. Arch. Expeditions to Syria*, Div. III, Section A, Part 4, Leyden (Brill).

¹²⁹ *Rev. Bibl.* x. 282 ff.

¹³⁰ *Pal. Expl. Fund Q.S.* 1913, 190 f.

¹³¹ *Zeits. d. d. Palästina-Forsch.*, lxxvi. 249 ff.

¹³² I do not know *Nile Delta*, *etc.* 17, 918 ff.

¹³³ *Pal. Expl. Fund Q.S.* 1913, 147 f.

¹³⁴ *Bib. Mus.* lxxvii. 634.

¹³⁵ *Zeits. d. d. Palästina-Forsch.*, lxxvi. 219 ff.

¹³⁶ See i. 140 ff.

¹³⁷ *Am. Journ. Arch.* xvii. 157 ff., 304 f.

¹³⁸ *Bull. soc. franc. des fouilles archéol.* 1912, 37 ff.

NOTICES OF BOOKS.

Fouilles de Vroulià (Rhodes). Par K. F. KRON. Pp. 275; Map, 47 Plates and 139 Cuts. Berlin: G. Reimer, 1914.

This is a magnificently produced instalment of the results of the recent Danish Expedition to Rhodes, detailing what was found in a small seventh century B.C. settlement situated in a little plain close to the southern extremity of the island. Judged by the number of burials, this settlement was in existence only about a hundred years, its origin falling about 680 B.C. The remains excavated consisted of a small shrine which yielded terracottas and other cult-objects, and of over a hundred graves, of which forty-three were those of children, mostly interred in jars. From these graves a rich series of vases was recovered, illustrating Rhodian fabrics of the seventh century, with a proportion of foreign importations from Cyprus, Naukratis, etc. These have been very minutely studied by Dr. Klich and arranged in series, and his work will be of great service to students of the still imperfectly known ceramics of the Ionian and Doro-Carian areas. Incidentally the evidence here collected tends to confirm the date ascribed to the early objects excavated in the Ephesian Artemision in 1904-5, and also the existence of Naukratis as a productive Greek centre prior to the time of Amasis. The author deals at length with the typical motives of Rhodian decoration and attempts to trace their local origin. For various reasons he ascribes the inspiration of the animal and bird motives to south-western Asia Minor and the Taurus, where Mr. Solms has assured him that the *oryx* or wild goat, as distinct from the ibex, has always ranged, as well as the goose-like shell-duck, another common motive. When one looks over the fine coloured plates here devoted to comparatively common types of vase, one wishes there were a Fondation Carlsberg in this country to pay for similar sumptuous illustrations of a very great many objects at present unpublished. D. G. H.

Demosthenes, and the Last Days of Greek Freedom. By A. W. PICKARD-CAMBRIDGE. Pp. 512. 26 Illustrations and Maps. London: Putnam, 1914. 5s.

The appearance of this volume not only serves to redress the unequal balance between Greece and Rome in the Heroes of the Nations series, but it fills a conspicuous gap in the list of English historical works on the fourth century B.C. The chief qualities of the present book are a lucid and unpretentious style, a sound but unobtrusive erudition, and an admirable fairness of mind in dealing out praise and blame both to Demosthenes and to his opponents. As examples of this judicial attitude we may quote the chapter on the working of the Athenian constitution, the definition of Eubulus' policy (pp. 126-131), and the summary of the discussion on the *panoptoleia* (pp. 292-298). As regards the central character of the story, Mr. Pickard-Cambridge will appear to some of his readers to have overrated the wisdom of Demosthenes' crusading spirit against Macedonia. It is

after all an open question whether the 'political liberty' for which Demosthenes fought, i.e., liberty for the bigger Greek cities to oppress the smaller, and for all to drain the nation's life-blood in endless internecine war, was preferable to a federation under the liberal conditions imposed by Philip. On the other hand willing assent should be given to the vindication of Demosthenes' purity of motive, which is convincingly upheld against the loose innuendoes of ancient and modern critics. A few criticisms on points of detail may be offered here. The assertion that Antiphon received 20 per cent. for his forensic speeches (p. 37, n. 5) has only conjectural value, and great uncertainty attaches to the estimation of the Second Confederation's revenue at 350 talents (pp. 93-4). The balance of evidence indicates 349, not 351.0 n.c., as the date of the First Philippic, and the transference of the siege of Methone from 353 to 355 n.c. has little to commend it. But as a rule the author has made very sure of his facts, and where the facts cannot be ascertained he is always scrupulous in stating his case with proper reserve. The illustrations are well chosen, a large proportion of them being derived from recently excavated sites.

The Composition of the Iliad. By AUSTIN SMYTH. Pp. 225. London: Longmans, 1914. 8s. net.

The object of this essay is to demonstrate that the *Iliad* of Homer at one time consisted of 15,500 lines, neither more nor less, divided into forty-five sections of 300 verses each. To restore this original, 2,193 verses have to be cut away. The largest excision is that of K or the *Doloneia*, which is removed bodily, but after inadequate treatment.

To illustrate the procedure adopted, a case may be taken which is deemed so obvious that it is disposed of in a single page,—a section of 918 lines, including the whole of Ψ and the first 21 lines of Ω . It now makes Mr. Smyth's 41st, 42nd, and 43rd lays of 300 lines each, the 18 lines to be rejected for that end being found at once in a 'reminiscence' of Nestor's Ψ 623-646. But (1), are the 21 lines of Ω the close of the 'Adia' or the proem to the *Adia*? Many would say the latter unquestionably, and for proof would hardly require to go beyond the opening words of Ω , $\lambda\acute{\iota}\rho\epsilon\ \delta'\ \epsilon\gamma\omega$. (2) The last of the 18 lines cut out, 646, does not belong to the reminiscence. (3) What about the other lines and groups of lines in Ψ to which the critics have taken most serious objection, for instance 92 and 565, of very doubtful authority, and the three contests in 798-883? (4) Is it likely that a tract of 900 lines would escape with contamination at only one point, if the poem was open to manipulation by Pick-Poets and Beardcutters? And lastly, (5) the first of the three lays—if the description is allowed—ends in the course of the enumeration of the competitors in the chariot-race, and the second in the middle of a colloquy, the third actually beginning with the line, $\epsilon\alpha\iota\ \mu\epsilon\ \phi\alpha\sigma\acute{\iota}\nu\tau\alpha\ \tau\alpha\upsilon\tau\alpha\ \sigma\tau\epsilon\phi\acute{\alpha}\nu\epsilon\tau\alpha\ \sigma\pi\alpha\sigma\theta\acute{\epsilon}\alpha$. Such a delimitation must be rejected absolutely.

And the whole scheme has this prime defect, already noticed in the dissection of Ψ , that the mass of interpolations which have been, so the authorities think, established in any given area are left unnoticed. A critic of the *streichmässig* school, a Fick, a Heringhaus or a Robert, would easily find passages as worthy of the distinction of athetesis as those selected by Mr. Smyth to make up the tale of lines which he must abandon to get the round 300. As regards the treatment of individual cases, too much importance seems to be attributed to linguistic tests and repetition, but generally the discussions are characterised by ingenuity, moderation and good sense, and in several instances the defenses of parts of the poem against the disruptionists is admirable. There is a vindication of the *Proteus* which seems to be as good as anything ever written about that episode, not excepting even Andrew Lang's exposition in his *World of Homer*.

But in regard to the main thesis, the book is quite unconvincing. Many, we fear, will close it with the *Zählenspiele* of von Halm, the strophists, Fick and his pyramidal *Moria*, and Ludwig and his *Hymenaeus*, but it is better than these. Others will doubt-

less find the presumption against an original construction in lays of exactly 300 lines strong enough to warrant the rejection of Mr. Smyth's scheme out of hand. But he has something to say on that point, and in our ignorance of conditions which obtained in the early days of the epic, it is dangerous to dogmatise. It is enough to say that the detailed proof fails. We had better rest content with Drerup's suggested limits of the various *thapsodias* as they were, if it is known, recited.

An index would have been a useful addition, especially as the lays are not considered in the order of the text. On p. 183, 'p. 184' should apparently be 'p. 218.' A. S.

Homer, Dichtung und Sage. I.—Ilias. Von ERICH BETHE. Pp. 374. Leipzig: Teubner, 1914. M. 8.

It is difficult to review a German book on the morning (August 29) when we hear of the sack of Louvain.

Herr E. Bethe, who has been active in more than one province of philology, and has started various theories, of no great probability, by which Homer is affected, now comes forward with a pleasantly written and well printed book on Homer himself. He advances that the *Iliad* as we have it is the work of a sixth-century Athenian poet who enlarged an original poem on the wrath of Achilles of about 1500 lines by the addition of various 'Kleinopen' and parts of more. Personally I regard this statement as inconceivable, and the argumentation on which it is based as a mere illusion. The book however deserves to be read; it displays more taste, moderation and even common-sense than we are accustomed to, and is certainly the best German book on Homer written for some while. It is nearer the truth than anything published by Belzner, Drerup, Finsler or Hömer. In fact, Bethe's conclusion expressed as a formula, 'the *Iliad* is the result of a great artist working upon traditional material,' is acceptable; unfortunately, the application given to this principle results in the obvious absurdity of the greatest architectonic poet of the world being hidden in the period of Solon and Theognis and imposing himself on the historical memory of the Greeks (which was quite a long one), as three or four hundred years older and the father of a school whose latest member (Eugammon) wrote about the time that the real Homer was getting born. Who was this sixth-century genius? Someone, at best, of the calibre of Onomacritus, whose style even Pausanias could distinguish from the real Musaeus, and who could not forge an orach successfully. Transfer Herr Bethe's architectonic Homer from 550 to 900, and he becomes credible. Along with this general want of perspective goes the detail that the text of the *Iliad* and the *Odyssey* descends from archetypes of the sixth century. This is the result of the belief in Athenian interpolation, which it is apparently impossible to extirpate from people's minds. Herr Bethe may fight the matter out with Mr. Bollig (*Am. Journ. Phil.*, 1914) who holds that our MSS. are children of an archetype of a.c. 150.

The analysis, of which the book consists, is acute, though perverse in places. Book IX is made to be original; the sixth-century genius fabricated Book XIX. The next volumes may afford better food for controversy. There are some curious errors in spelling: p. 41, 'Roche di Cattaro'; p. 51, 'Vindobonnense'; p. 231, 'Verral'; p. 300, 'Guilh. Murray.' Professor J. A. Scott is shorn of his first initial: 'Flaxmann.' 'Rise of the Greek Epic,' are not English; 'treffeicher,' p. 50, does not seem German; 'Twl,' p. 51, is not the right abbreviation for Townley.

T. W. A.

Studies in the Odyssey. By J. A. K. Thomson. Pp. 350. Oxford: Clarendon Press, 1914. 7s. 6d.

Mr. Thomson, who sails under the colours of Miss Harrison and Professor Murray, has given a convenient summary of his book in his preface. The 'story of the Odyssey is the history not of a man but of a divinity.' Ulysses is 'in certain respects a double of Autolyca, a Boeotian; he is 'one of those divine supernatural beings, made familiar to us by the *Golden Bough*, who are thought to die and come to life again.' Penelope was originally 'a water-fowl divinity connected with the spring Arno, near Mantinea.' The story was brought by Boeotians or Minyans to the Mores and thence to Ionia. The Achaeans came from the north-west. Homer is a common noun (*Iuppiter*). This is sufficient as a specimen.

Mr. Thomson evidently likes his subject, and writes agreeably. He has chosen a theory which has spent its force, and developed it, I am afraid, without judgment or self-criticism. He has constructed a flimsy building on a foundation of sand. Instead of gathering passages and references and so increasing this fresh literature, he would have better spent his time considering the validity of his teachers' premises. I do not think the Press of my University should have accepted this book. T. W. A.

Aus Platos Werkezeit: Philologische Untersuchungen. Von MAX POHLSEN. Pp. 428. Berlin: Weidmann, 1913. M. 10.

Dr. Pohlenz presents a detailed account of the earlier Platonic dialogues. He groups them, according to the order of composition, as follows—(1) the Socratic Period; *Apology*, *Laches*, *Charmides*, *Lesser Hippias*, *Protagoras*; (2) the Crisis; *Gorgias*, *Meny*, *Republic* (first edition), *Menexenus*; (3) the new Weltanschauung; *Phaedo*, *Phaedrus*, *Lysis*, *Symposium*. He thinks that there was a first edition of the *Republic* containing only the political ideas of the dialogue which we possess, and this hypothetical first edition he connects closely with the *Menexenus*, regarding the two dialogues as together embodying Plato's criticism of Athenian politics. In the doctrine of *Time* propounded in the *Phaedrus* and *Symposium* he sees the programme of the newly founded Academy. The *Greater Hippias* is spurious.

The sub-title of the book, 'philological enquiries,' is somewhat misleading. The author's method is certainly less purely 'philological' than that of many other writers on the subject. Considerations of style and *Sprachstatistik* do not, as we should expect, play a leading part. The relative dates are chiefly determined by historical allusions or interrelations of doctrine between the various dialogues. However, if 'philological' is the alternative to 'philosophical,' the use of the term may be justified: for the book makes no attempt to consider or appraise the teaching of the various dialogues on its own merits. Since it is difficult to give an intelligible account of a philosopher's development without essaying an interpretation of his philosophy, this method of procedure is open to criticism. The fact that it is fashionable does not entirely excuse it.

The enquiry opens with a short chapter on the question of the historical truth of the Platonic dialogues. Dr. Pohlenz seeks to settle this vexed question by general considerations. He tries to show what would be the status of Socratic dialogues in Greek literature; and what kind of truth the Greek reader would expect. He thinks they were a new literary form, half memoir (like those of Ion), half debate (like those in Euripides' or Aristophanes' plays and Herodotus' or Thucydides' histories). He is sure that the reader would take it for granted that the views established were those of Plato, expecting at the same time the portraiture of the characters to be essentially historical. He thus imagines Plato to have had a double object in writing the dialogues: (1) to expound his own views; (2) 'to exhibit the real Socrates, not by photographic reproduction of particular scenes but by a situation—freely invented, perhaps—in which his whole nature stood out sharp and clear.' It seems clear that these two aims are not capable of

simultaneous realization. The views expressed must affect the reader's estimate of the character of the speaker, especially when the speaker is a philosopher, and the 'whole nature' of Socrates cannot stand out in sharp definition if the intellect is that of Plato. But on these premises Dr. Pohlenz feels himself entitled to attribute to Plato any and every doctrine which the Socrates of the dialogues accepts. Its acceptance by the Platonic Socrates proves its acceptance by the historical Plato. The only legitimate question is whether it was also accepted by the historical Socrates. What is meant by calling the earliest dialogues Socratic we are not told: but presumably these are dialogues in regard to which the question above stated can be answered with a general affirmative.

From this it will be seen that Dr. Pohlenz maintains, even possibly in an exaggerated form, the old-fashioned view of Plato's methods on which the combined philosophy and philology of St. Andrews University have recently declared relentless war. It cannot be said that the hypothesis receives additional confirmation or even emerges unscathed in credit from the hands of Dr. Pohlenz. It leads him to treat Hippocrates as a fashionable rival of Plato (pp. 69-70), to regard the *Protagoras* as essentially a criticism of the sophist whose name it bears, and its Hedonism as expressing Plato's considered opinion at that date (pp. 92, 103), to explain the *Meno* (pp. 169-70) as a reply to Gorgias' reply to the *Gorgias* (of which, he suggests, Plato may have sent his elderly rival a copy). It is true that one tradition makes Gorgias only 83 when Socrates died, that he is said to have lived to 110, and that he was a byword for senile vigour; but a controversy between a man of 90 (or more) and one of 35 is a strange phenomenon, and why was Plato so preoccupied with past generations? Surely thought had moved somewhat since Hippocrates, Protagoras, and Gorgias visited Athens, and the question whether these sophists could or could not educate the young must have become rather academic in the interval. The truth here is undoubtedly with Professor Burnet. It was not Plato but Socrates who was the rival of the Sophists; and Dr. Pohlenz is the victim of the dramatic illusion produced by Plato's art. He is to be added to those 'many writers' of whom Professor Burnet says that they 'speak as if the first half of the fourth century ran concurrently with the second half of the fifth' (*Plato*, *Introd.* p. xxxiv).

Dr. Pohlenz is nevertheless able to discern 'Socratic' and 'unsocratic' elements in Plato's teaching, attributing what is unsocratic mainly to the influence of the Pythagoreans, but partly also to that of the medical writers. The theory of Forms is the exception. To it he assigns no provenance, considering it to be Plato's own invention. In all this Dr. Pohlenz is following more or less carefully in the footsteps of other scholars, and it is hard to find anything novel or distinctive in his point of view. In his hypothesis of an earlier, purely political *Republic*, perhaps he is original; but that anyone who has read and tried to understand the *Republic* should adopt such a theory passes comprehension. In order to sustain the hypothesis Dr. Pohlenz has to argue (here, unfortunately, not alone) that the tripartite psychology is an inference from a tripartite state; and in order to account for the omissions in the recapitulation at the beginning of the *Timaeus* he is led to invent yet a third reduction of the *Republic* in which once more the political views are isolated from the rest. A hypothesis so clumsy is surely self-condemned.

We have, then, little reason to recommend this work to English readers. In principle it seems to us ill-conceived and erroneous, and in detail unreliable through lack of insight and failure to follow the movement of philosophic thought. It seems to be exceedingly difficult to write a good book about Plato: at least half of the many books which have him for subject could well be spared; and we cannot find in Dr. Pohlenz's work enough help in the interpretation of the Dialogues to withhold us from passing upon it the same verdict.

The Hellenica Oxyrhynchia: Its Authorship and Authority. By E. M. WALKER. Pp. 149. Oxford: Clarendon Press, 1913. 5s.

The authorship of the fragment of a Greek historian discovered at Oxyrhynchus in 1906 has been the subject of much dispute. The period dealt with in the book to which the fragment belongs has usually been assumed to lie between 411 and 394 B.C., but, as Mr. Walker shows, these limits are by no means certain. It is clear, however, that the events of the period were described on an extensive scale. The most important information given relates to the campaign of Agesilaus in Asia Minor, the naval operations of Conon off Carinus, and the Constitution of Boeotia. Mr. Walker's opinion is that the fragment belongs to the XVIIIth book of Ephorus. He shows that, though the history of Ephorus was a general one, there is no reason why he should not have described events with great fulness as he approached his own times; that there are striking coincidences of language between the new historian and Diodorus, who drew largely upon Ephorus for his information; that the interest displayed in the topography of Asia Minor, the campaign of Conon, and the affairs of Boeotia is quite suitable to Ephorus. Another very strong point in favour of Ephorus' authorship is the style, which is monotonous and frigid to a degree. Mr. Walker argues his case very acutely, and though the reader will hardly be convinced that Ephorus must be the author he will certainly find many reasons for believing that he *may* be. Some of the reasoning depends a good deal upon assumption, e.g. that relating to the probable length of a book of Ephorus's history, while the coincidences of language with that of Diodorus are not so close as to preclude the attribution of the work to an unknown fourth century historian who borrowed from Ephorus, as did Diodorus at a later date. Cratippus is too shadowy a figure to enable us to express an opinion about his claims with any confidence; and the style and political tendencies of the fragment are certainly against Theopompus. Mr. Walker deals incidentally with several interesting points, e.g. the rival claims to credibility of Xenophon and the new historian (who certainly did not borrow from Xenophon), the Boeotian Constitution, the question of the date to which Ephorus carried his history and the continuation of the work by his son Demophilus. The suggestion that Demophilus carried on the work to 341-0 because that date is a generation of thirty years after the battle of Leuctra is an interesting and plausible one. The book is obviously the fruit of very careful study and forms a valuable contribution to the literature on the new historian.

The Archaeology of the Old Testament: Was the Old Testament written in Hebrew? By EDWARD NAVILLE. Pp. 212. London: R. Scott, 1913. 5s.

A perusal of Professor Naville's remarkable volume raises the question, What is archaeology? For of archaeology in the ordinary sense there is little in the book. Professor Naville takes no account of actual archaeological discoveries in Palestine. One expected that a work, written by an archaeologist of repute, which Professor Naville is, on the Archaeology of the Old Testament would have been chiefly concerned with the question of how far the new discoveries in Palestine affect the question of the age and growth of the Hebrew scriptures. But we find nothing about this matter: the book is concerned solely with theories of the supposed internal 'archaeology' (if we may use the word in this sense) of the Old Testament, and has nothing to do with any of the questions that interest the ordinary archaeologist, with the sole exception of the Aramaic papyri from Elephantine. Professor Naville's work is merely designed to prove the thesis that the Old Testament was not originally written in Hebrew, but in cuneiform, and by Moses personally. Moses inscribed the whole of the Pentateuch on clay tablets, and this cuneiform original was afterwards transcribed into Aramaic, and that, eventually, into Hebrew. This is a specious theory which might obtain support from

recent archaeological discovery if we choose to interpret this in a way favourable to the theory. More than this we cannot say, but must leave Professor Naville to the Higher Critics, with a recommendation to mercy.

Le Consul Jean Giraud et sa Relation de l'Attique au XVII^e Siècle (*Mémoires de l'Académie des Inscriptions*, XXXIX.) Par MAXIME COLLIGNON. Pp. 57. Paris: Imprimerie Nationale, 1913. 2 fr. 60.

All Athenians, by birth or adoption, should welcome this addition to their *εὐρυβογγισμὸς*, discovered at the Bibliothèque Nationale among a series of documents formerly belonging to Fourmont, and originally collected by Noiset in connexion with his embassy and voyage to the Levant. M. Collignon has already published (*C. R. Ac. Inscri.*, 1897, 57-71) from the same collection Giraud's account of the antiquities of Athens, which on account of the considerable quantity of contemporary material already accessible (much of it derived from Giraud himself) affords little new matter of value. For the life of seventeenth-century Athens and the state of Attica, on the other hand, we have little information outside Spön and Wheler, and the report of a consul and a resident carries more weight than that of the most intelligent tourist. We have now for the first time reliable and detailed statistics of the population, revenues, and commerce of Athens and Attica and a full account of the Turkish local government of the period. A point of special interest for ancient history is to be found in the fact that the main route from Athens into Boeotia was in the seventeenth century the now abandoned pass of Phyle: there was even a caravanserai for travellers below the fortress. To his description of the latter our consul adds a popular account of its origin. This is an interesting variant of the 'Rival Lovers of the Princess' theme, which is told also as far afield as Aspendus in Pamphylia.

The Kings of Lydia: A Rearrangement of some Fragments from Nicolaus of Damascus. By LAURE ALEXANDER. Pp. 61. Princeton University Press, 1913.

The main object of this dissertation is to simplify the traditional story of the Lydian monarchy as recorded in Xanthus and Nicolaus of Damascus. It contains several new suggestions of undoubted value, e.g. that the Tylonidae of Nicolaus fr. 49 are identical with the Heracleidae of Herodotus, and that the town of Ascilon and its sacred pond (Xanthus frs. 11 and 33) are none other than Dascylium and the Gygaean lake. The attempt to identify the three kings named Meles is seductive, if not conclusive. On the other hand it is clearly wrong to identify Adramys the uncle of Croesus (Nicolaus fr. 63) with Adramytes the brother of Croesus (Stephanns s.v. Ἀδραμύτης), and the conception of the combined Meles as a usurper is equally untenable: as Radet has pointed out, the story in Nicolaus fr. 49 loses its point unless Meles is taken for the legitimate crown prince.

Studi siciliani e italiani. By L. PARETI. Pp. 356. Florence: Seeber, 1914. L. 12.

This volume is the first of a new Italian series in which important contributions to the study of Ancient History and Classics will from time to time be published. Prof. Pareti, who is joint editor with Prof. de Sanctis, has given the series an excellent start. His book is a collection of essays dealing mainly with the critical years of Sicilian history at the opening of the fifth century B.C. Much fresh light is thrown in these articles upon the vicissitudes of the conflict between Greeks and Carthaginians, and upon the growth of the two rival coalitions which brought on the great battle of Himera. Of Prof.

Parisi's new conclusions some few are much open to dispute. The highly constructive arguments with which he seeks to transfer the date of Hippocrates' death from 491 to 485 B.C. do not suffice to overthrow the clear evidence of Aristotle in favour of the former year. Still less can we accept the reasoning by which he would postpone the battle of Himera to 479 B.C. The parallels between Himera and Plataea which he detects in Pindar and Aeschylus are very far fetched, and his attempt to explain away the synchronism between the campaign of Himera and that of Thermopylae-Salamis as a fiction designed to exonerate Gelo from the charge of not having assisted the homeland Greeks is quite unconvincing. But for the most part his reconsideration of the history of 510-480 B.C. is well supported by the evidence of texts and monuments, of which he has pressed every available scrap into his service, and *a priori* it is highly probable.

Of the other essays we may here mention *homages* even a chapter on the coins of Selinus, and another on the history of Gela. A short article is devoted to Theognis. Prof. Parisi contends, not without reason, that Theognis was a native of Megara Hyblaea and a contemporary of Gelo, but forgets to ask whether Theognis was a man, or whether he was a syndicate. A chapter on the chronology of the Greek colonies in Sicily is chiefly remarkable for the use made of pottery evidence in favour of a very early date for the first foundations. At present the provenances of proto-geometric and proto-Corinthian vases is too uncertain to yield any sure basis for the history of Sicilian colonisation, but pottery may some day supply the key to most of the problems involved.

Prof. Parisi's book does not make easy reading, and many of his arguments are highly involved. But this is hardly a matter for remorse. It is rather an index of the conscientious and closely reasoned character of his work.

Les Emprunts de la Bible hébraïque au Grec et au Latin. Par MAURICE VERNES. Pp. 250. Paris: Laroux, 1914. 7 fr. 50.

Much has been written of late as to the influence exercised by the Orient on Greece. M. Vernes instances H. Levy's 'Die Semitischen Fremdwörter im Griechischen' (Berlin, 1895). But he holds it necessary to enquire into the other side of the problem, viz. the influence of Greek on Hebrew. The subject has been exhaustively treated for the post-Biblical Hebrew in a series of works culminating in S. Krauss' 'Griechische und Lateinische Lehnwörter im Talmud, Midrasch und Targum' (Berlin 1898, 9). M. Vernes, however, deals with the Biblical Hebrew. In this book he arranges, alphabetically, about 300 Biblical words, which he more or less positively traces to Greek or (less freely) to Latin originals (he suggests Greek originals for 320 and Latin for 40 of these words). He does this with a full consciousness of the stirrings made in Assyriology, which has supplied parallels to many previously unexplained Hebrew words. In fact, M. Vernes may be said to be an opponent of the pan-Babylonism, now so current among Biblical scholars. It is generally conceded that Greek made some inroad into the Hebrew vocabulary after the conquests of Alexander. Baum had suggested that at an earlier age the Philistines, who carried Cretan civilisation to the coast of Palestine, might have brought some Greek words with them. More generally, M. Vernes thinks that such Greek terms may have been conveyed in Palestine through commercial intercourse. His identifications are sometimes startling, as when he not only compares but actually derives the consonants of the Hebrew *halakim* ('to be wise') from the Greek *yepe* (*γερωνεια*); or *selem* (image) from *syolao*; *qahal* (assembly) from *dekalagis*; or *yadah* from *ēda*; or *yohel* (jubilee) and *dath* (law) from the Latin 'jubilo' and 'edictum'; or *kuttaneth* (tunic) from the Greek *xrtar*; or *millah* (word) from *lalla*. On such suggestions, and many more of the same type, it is obvious that scholars must exercise the utmost caution; though in cases of grave doubt, such as the origin of the Hebrew

kerub (cherub), one might be more ready to consider a Greek origin ($\gamma\kappa\rho\upsilon\beta$ — $\gamma\kappa\rho\epsilon\beta\omicron\varsigma$); similarly with $\gamma\alpha\iota\iota\upsilon$ (wine) which is here, and has been by others, derived from $\alpha\iota\epsilon\epsilon\gamma$. M. Vernes seems to work on the principle that when Assyrian has failed to provide a satisfactory origin for certain Hebrew words (such as $qes\bar{it}$, a coin, and $shar\bar{it}$, a sceptre), a non-Semitic source is probable (in these cases $\kappa\omicron\tau\tau\epsilon$ and $\kappa\omicron\sigma\tau\epsilon\rho\epsilon\varsigma$). This theory, together with its ingenious exposition in M. Vernes's volume, deserves serious, though extremely cautious, consideration. Some Hebrew (Aramaic) words such as the *samponya* ($\sigma\alpha\mu\pi\omicron\upsilon\alpha$), the *psalterin* ($\psi\alpha\lambda\tau\epsilon\rho\iota\omicron\varsigma$), and the *kithara* ($\kappa\iota\theta\alpha\rho\alpha$) of Daniel have, of course, long been recognised as very probably Greek. But Daniel belongs to the Maccabaean age (c. 165 B.C.)

Pausanias in Olympia. Von ADOLF TRENDLENBURG. Pp. 194. Berlin: Weidmann, 1914. M. 3.

A useful study of the topography of Olympia as described by Pausanias. The author's object is to vindicate the authority of the latter and to protest against the tendency of archaeologists to disregard the literary evidence. Pausanias visited Olympia in person: he describes what he saw himself or was told by the local guides; he is not indebted to any previous writers, much less does he incorporate extracts from them in his work. When we possess an independent work of such authority, excavations must be interpreted in the light of the written evidence, not *vice versa*. Difficulties are due chiefly to the misunderstanding of the text.

The author has no difficulty in establishing his main contentions, but his discussion of topographical difficulties suffers sometimes from the intentional omission of the evidence of the spade. Most of his conclusions are sound but perhaps less original than he supposes. He appears to have arrived independently at the explanation of the *Theatron* which was published by Louis Dyer in vol. xlviii. of this journal. But his treatment of the Treasuries is quite inadequate. He dismisses them in a few lines with a single emendation, entirely ignoring the difficulty of identifying the ten treasuries enumerated by Pausanias with the twelve foundations revealed by the excavators. In locating the altar of Zeus between the Herakleion and the Pelopion he is hardly true to his own principles. Not only does he give a somewhat unnatural meaning to the words in which Pausanias describes the position of the altar but he ignores the statement of Pausanias which he quotes himself in another context that the Herakleion and Pelopion are sufficiently far apart for statues and other offerings to be placed between them. If there were statues and other offerings in this narrow space, there was certainly no room for the great altar also. If the altar stood there, why does not Pausanias mention it instead of the statues? Again while Trendelenburg rejects the usual identification of the Theokoleon with the large building S. of the Palaestra, he makes no attempt to explain the purpose of this building. Nor is it clear from the existing remains how the Theokoleon can have stood close to the Pythaeon.

E. K. G.

De Veterum Macarismis. Scriptit G. L. DRACHMÄT. Pp. 71 (*Kleinere geschichtliche Versuche und Fortarbeiten*). Gießen: Topelmann, 1914. M. 2. 30.

An interesting little work, dealing with the meaning attached to such phrases as happiness or bliss by the Greeks and Romans; the views of Jewish and Christian writers are not included. The first chapter deals at some length with the words employed to denote these ideas, tracing in detail the changes in expression through literary history. The second chapter, abandoning the chronological order, ranges under groups the reasons for which men have been pronounced blessed or fortunate by the poets. The compilation, as in other works of this series, seems both complete and accurate.

De coronarum apud antiquos vi atque usu. Scriptit J. KOCHLING. Pp. 98.
(*Religionsgeschichtliche Versuche und Vorarbeiten.*) Gießen: Topelmann, 1914.
M. 3, 40.

While much has at various times been written on the subject of the crowns of the ancients and the occasions on which they were worn, the reasons for the practice have hitherto largely escaped investigation. This omission is remedied in the present work, which forms part of the well-known series of *Religionsgeschichtliche Versuche und Vorarbeiten*. The practice is here traced back to the binding force of the crown or fillet as representing an original fetter, or, in the case of buildings, an enclosure; and while this, the primary meaning, is derived from the form, the use of certain materials, as olive or laurel, or the later imitations of these in metal, can also be traced to similar prophylactic ideas. The second and longest chapter groups the various instances of the use of crowns in ancient life, and traces the survival in these instances of the primitive ideas. In conclusion, the development of these ideas and of the use of crowns is briefly sketched through the Christian centuries down to modern times.

Intermediate Types among Primitive Folk. By EDWARD CARPENTER. Pp. 185.
London: George Allen, 1914. 4s. 6d.

That between the normal man and the normal woman there exist a number of intermediate types—types, for instance, in which the body may be perfectly feminine, while the mind and feelings are decidedly masculine, or vice versa, is a thing which only a few years ago was very little understood . . . and that they might possibly fulfil a positive and useful function in society is an idea which seems hardly if ever to have been seriously considered. Mr. Carpenter accordingly gives us chapters on the Intermediate as Prophet or Priest, as Witch or Wizard, and as Inventor of Arts and Crafts; and then, after a discussion of Hermaphroditism, devotes the rest of the book to the contemplation of the Intermediate as Warrior, e.g., Homosexuality as productive not of effeminacy, but of the opposite. The customs of the Dorian Greeks are extolled at length and illustrated by comparison with the rules of the Samurai of Japan. The book makes interesting reading, though the author's defence of pederasty is perhaps not intended to be taken too seriously.

The House-Door on the Ancient Stage. By W. W. MOOREY. Pp. 105.
Baltimore: Williams and Wilkins, 1914.

This dissertation for the Doctor's degree of Princeton University treats under five heads the problems connected with the use of the door in the background of the ancient stage. In the first chapter the author attacks the theory of some scholars that in Plautus and Terence there was an inner and an outer door, the latter open by day: he shows that the door was single, usually closed, and that the different words *ianua*, *foras*, *intus* are applied to it without distinction. The practice of knocking at the door and the vocabulary employed to denote the act are next examined. In the third chapter it is shown that Plautarch and Hollandus are mistaken in supposing that an actor knocked on the inside of the door before passing out on to the stage. The stage door is next shown to have opened outwards. The fifth and longest chapter deals with the general use of the back door and parados on the stage and gives a full list of the expressions and phrases used in this connexion. The writer in addition to the literary material has made full use everywhere of extant archaeological evidence.

Inscriptiones Graecae. Collegit OTTO KERN. Pp. xxii + 59 plates. Bonn: Marcus and Weber, 1913. M. 6.

Those who follow the progress of the great Berlin Corpus of *Inscriptiones Graecae* cannot fail to be struck by the tendency there shown to attach less and less importance to the reproduction of inscriptions in 'epigraphical' as well as in the ordinary current type, not only because of the greater bulk and cost entailed, but also because it appears to lay claim to an accuracy of representation to which in reality typography cannot attain. At the same time the value of the photograph and the aquatint is increasingly recognised, since they alone are not *subditi* inscriptionum longe imparet. It is at an opportune moment, therefore, that Otto Kern has edited, as Volume VII. of the *Tabulae in usum scholarum*, published under the direction of Hans Lietzmann, a series of fifty plates containing over 120 inscriptions, ranging from the earliest times to the fourth century of our era. The reproductions, which are made from photographs taken from the stones themselves (except in four cases, where excellent aquatints have served the purpose), are for the most part models of what such illustrations should be, and afford the student for whom access to inscribed stones is impossible an invaluable opportunity of practice in reading original Greek documents and of familiarising himself with the main types and modifications of the epigraphical script. In several respects it would be possible, though this is not the place, to criticise the selection made, but no two scholars would agree in their choice; nor must we forget the practical difficulties involved in such an undertaking, and the editor's statement that a number of photographs which he had intended to insert proved to be unsuitable for reproduction, and had to be replaced by others of less interest.

The Interpres, which is in Latin, contains a concise description of the plates, together with brief, but useful, bibliographies of introductory works on Greek epigraphy and of standard collections of inscriptions, a conspectus of the plates and a table of concordance. It is here that the work most requires revision. For example, the stone illustrated in the upper part of Plate 16 is identified (pp. xi, xxii, xxiii) with *I.G.* i. 179, *Dittenb. Syl.*² 26, and *Nachmanson, Hist. art. inschr.* 12: in fact, it is *I.G.* i. Suppl. 179 a. 6., a totally different document from *I.G.* i. 179, which is reprinted by Dittenberger and Nachmanson, *loc. cit.*, and it dates from 431-0, not (as stated on Plate 16) from 435-2 B.C. Again, the table of concordance is so imperfect as to be of little use: to judge from it, only six texts from *I.G.* i. and i. Suppl. are here illustrated, while in reality there are nine, and the same table omits no fewer than six of the inscriptions found in *Dittenb. Syl.*², viz. 33, 153, 696, 725, 737, 822. With a little care, however, these and other such defects can be eliminated in a second edition, and when the time comes for preparing that, we would ask the editor to introduce two further changes. A brief title should be given to each inscription (at any rate to the more important among them) to indicate its nature and interest, and, secondly, the text of every inscription should be printed in ordinary type, as has been done in three or four cases, so that the student may be able to check the correctness of his readings and restorations, and to get help in his difficulties, even if out of reach of a well-equipped library containing all the books to which he is here referred. If it be objected that this would unduly increase the size and price of the book, we would suggest the omission of the *Tabularum Conspectus* and of details like 'a. 0,535, l. supra 0,856, infra 0,873, cr. 0,155 (*nitens a. 0,053-0,060*)', which are of little practical interest to the ordinary student. But in spite of these defects the book deserves, and will gain, a place on the shelves of all who are interested, from whatever point of view, in the study of Greek inscriptions.

De l'Aspect verbal en Latin ancien et particulièrement dans Terence. Pp. 478.

De la Phrase à Verbe Être dans l'Ionien d'Hérodote. Pp. 114. Par D. BARLENET. Paris: Champion, 1913.

The most difficult problems in Latin grammar are connected with the verbal system. The study of what, after the practice of Slavonic grammarians, is called the Aspect of the verb is in Latin complicated by the profound modifications which that language has introduced into the old tense system. Perfect forms like *venit*, *teligi* and present stems like *-uenat*, *-ingit*, have for the most part disappeared, while on the other hand, the three conjugations of derivative verbs show few if any traces of the old stem variations. The result is that in Latin the Aspect of the verb must be left to be indicated by the context, or is shown by the use of prepositional prefixes. M. Barlenet's general conclusion is that there are in Latin two, only two, aspects, the Imperfective and the Perfective, each of these attaching predominantly to particular tenses. The actual facts of the language, collected mainly from popular sources, are treated in great detail, and, on the whole, with skill and judgment. The only serious weakness is on the comparative side. Sanskrit, Slavonic, Greek and Germanic are referred to frequently, but the author has unfortunately neglected Celtic which in any comparative treatment of Latin syntax must occupy a prominent place. Here it may be noted that the use of the prepositions in *explicat*, *expugnat* and the like is illustrated by nothing so well as by the use of the same prepositions in Old Irish. A knowledge of this latter language would also have saved M. Barlenet from some perplexities, as that on p. 354 in connexion with the identity of *con* and *com*.

The same author's work on Herodotus deals with the position of the different members of the clause in *cis*-sentences, including those in which the verb is not expressed. It is of interest to observe that, except in *cis* phrases, Herodotus does not, as a rule, dispense with the copula. The latter is ordinarily attached to the predicate, and the normal order is Subject, Predicate, Verb. Other arrangements (Predicate, Verb, Subject; Predicate, Subject, Verb) imply some variation of sense or emphasis.

The Ottoman Empire, 1801-1913. By WILLIAM MILLER. [Cambridge Historical Series]. Pp. xvi + 547. Cambridge: University Press, 1913.

All students of the Eastern Question in general or of modern Greece in particular will be grateful to Dr. Miller for this extremely compressed but clear account, derived mainly from official sources, of the dismemberment of the Turkish Empire during the past century. The text includes the histories of the establishment and growth of the free nations of the Balkan peninsula down to the end of the recent war, with a select classified bibliography for those readers who wish to go further into details. The four maps, illustrating the Ottoman Empire in 1801 and the frontiers of the Balkan peninsula in 1856 and 1878 (as projected by the Treaty of S. Stefano and as carried out by that of Berlin) are specially welcome and instructive. The captions will object to the title of the book—altered, we believe, in the Greek edition—as misleading, since the *ex-destino* portions of the Ottoman Empire form the main subject. The periodical doses of western 'reforms' administered to Turkey herself, and their effect (or the lack of it), are surely of the greatest interest even to students of the Balkans. May we suggest that the appearance of a supplementary volume by the same hand would be a completely satisfactory answer to all such criticism?

Greek Philosophy. Part I. Thales to Plato. By JOHN BURNET. Pp. 300. London: Macmillan & Co., 1914. 10s. net.

Professor Burnet divides his account of Greek Philosophy into three books: Book I, 'The World,' deals with the Presocratics from Thales to Leucippus; Book II, 'Knowledge and Conduct,' deals with the Sophists, Socrates, and Democritus; Book III, 'Plato,' is half as long again as the other two and attempts the task of reconstructing, from the later Dialogues and from Aristotle, the views of Plato. The writing of the book is throughout concise and pointed; long footnotes are avoided; and Professor Burnet is to be congratulated on compressing so much material into so short a space.

In Book I Professor Burnet is much helped by his own excellent *Early Greek Philosophy*. He does not need to argue disputed points at length. He is able to write with freedom, assuming the results of that enquiry. Those who have already digested that book will find the *essence* here given valuable and stimulating, bringing into relief the points which are of importance for the later history of philosophy. But the new volume is not at all a textbook for beginners, and Book I should not be allowed to serve with such students as a substitute for the *Early Greek Philosophy*. The fact is that the true theme of the book is 'Socrates and Plato.' The Presocratics and the Sophists serve as introduction, while Democritus, to his cost, intervenes between Socrates and Plato, and is therefore dismissed in nine pages as an interference. Professor Burnet is no doubt right here as to chronology, but he is a little perverse. Chronology is not everything, and the book would be improved if Democritus were treated more adequately either at the end of Book I immediately after Leucippus or earlier in Book II between the Sophists and Socrates. The Sophists are kept rigidly in perspective. Protagoras alone is treated somewhat fully in an excellent section which establishes his date (a source of frequent errors), refutes the story of his trial, and gives him the prominence which he deserves.

There remains 'Socrates and Plato,' the strain to which all else is prelude. Professor Burnet called in his Introduction to the *Phædo* for a new history of Greek Philosophy which should proceed on the hypothesis that the words which Plato puts into the mouth of Socrates represent on the whole the doctrines taught by the historical Socrates during his life, instead of on the opposite hypothesis that they represent on the whole the teaching of Plato. Instead of seeking for an indigestible residuum that we may call 'Socratic' we are to look for a residuum that may be called 'Platonic.' Seeing that in the later dialogues Socrates is not as a rule the chief speaker, which gives a presumption that Plato is, the undigested residuum obtained by the latter procedure is likely to be smaller than that obtained by the former. Even the enunciation of this hypothesis must welcome the attempt to verify it in use and applaud the promptness with which Professor Burnet has executed his self-imposed task. Would that all inventors of hypotheses were equally prompt and lucid!

Socrates is dealt with in three chapters. The first gives an account of his life, based mainly on Plato. All historical and descriptive statements about Socrates contained in the Platonic writings are taken as true, and the oracle from Delphi is given the importance which the *Apology* gives it. The oracle was the beginning of Socrates' 'public mission.' Before it came Socrates had been a mere philosopher, discussing with his pupils problems of science and religion and developing his new theory of Forms. After it he was a public man, ready to meet all and sundry. At the end of his life, as we are told in the *Phædo*, he reverted to the problems which had occupied his youth. The oracle should be dated about 435, and Aristophanes' *Clouds* appeared in 423. But the Socrates of the *Clouds* is the Socrates of the time before the oracle. The caricature, then, was distinctly out of date; and the only explanation offered of this is the fact that Socrates' mission was interrupted by fighting at Delion in 424 and Amphipolis in 422. The discrepancy of time does not seem to be fully accounted for. In a second chapter the philosophy of Socrates is reconstructed from the dialogues of Plato up to and including the *Republic*. When Philolaus left Greece, Socrates 'became to all intents and

purposes the head of the Pythagoreans who remained behind,' sharing with them the doctrine of Forms, the belief in immortality, with its corollary, reminiscence, and some of the mysticism of the *Phaedo*, *Symposium*, and *Phaedrus*. The practical absence of any mention of the theory of Forms in the earlier dialogues is apparently explained, first, by the fact that the Forms belong to the earlier Socratic period while these discussions belong to the later 'public mission,' secondly, by the distinction between an inner and an outer circle. In a third chapter the problem of Socrates' trial is discussed. Professor Burnet holds that the true ground of condemnation was political. Socrates was justified in treating the indictment with contempt, since it was a mere pretext made necessary by the amnesty proclaimed upon the restoration of the democracy.

Limitations of space made it difficult for Professor Burnet to be quite explicit at every stage of his highly controversial argument, and the foregoing account may in some degree misrepresent his views. Professor Burnet seems to think that Socrates began by keeping a school after the fashion of the Ionian physicists, and suggests that he may have succeeded Archelaus (under whom he is said by Aristoxenus to have studied for many years) as head of his school. The *Phrontisterion*, as he truly remarks, is not the least like any sophistic enterprise but might pass as a caricature of that. The suggestion is made very tentatively and is not worked out; but Professor Burnet's plea for the substantial truth of the Aristophanic caricature would be greatly strengthened if it could be worked out satisfactorily. Clearly there are many difficulties in the way of accepting such a hypothesis. Plato offers no evidence in support of it, and no such school is known to later histories of philosophy. But if it existed, it is almost incredible that its memory should have perished, with the *Clowns* to keep it fresh. With this is connected the question of Socrates' relation to Pythagoreanism. A fuller and franker treatment of this question, with all the evidence set out, is very badly needed; and it is to be hoped that Professor Burnet may one day attempt it. As it is, by carefully piecing together the scattered notes and notices contained in the *Early Greek Philosophy*, the edition of the *Phaedo*, and this book, one gets a fair idea of Professor Burnet's opinion, but little idea of the evidence on which it is based. To us the inferences drawn from the *Phaedo* seem to be more definite than the illogical warrants. That the theory of Forms was partly Pythagorean Professor Burnet has often asserted; and he here tells us that the difference which Socrates made in it consisted in 'the systematic inclusion of what we should call moral and aesthetic forms on an equality with the mathematical' (§ 129). But the forms or 'figures' ascribed earlier to the Pythagoreans are those of musical scales and of numbers represented by dots, and have at first sight nothing in common with the Socratic forms which are (as Professor Burnet himself says in § 126) predications. Some of them may be called mathematical, but they are not figures: the typical instances are not *εἰρημῶν*, *εὐνομῶν*, but *ἀρετῶν*, *νικητικῶν*. Again, it is a favourite idea of Professor Burnet's that the later Pythagoreans under Philolaus became 'scientific' and dropped the mysticism of the School's early days. Accordingly the Socratic hymn is Socratic in immediate origin and not Pythagorean; and 'the friends of Philolaus were annoyed because Socrates . . . had revived the mystical side of Pythagoreanism, which they believed they had got rid of once for all' (§ 118). Yet the one doctrine on which in the *Phaedo* Simmias and Cebes expressly admit to having received instruction from Philolaus (though not in great detail) is the religious prohibition of suicide. Here also further elaboration is required.

The account of Plato begins with a biography, based mainly upon the *Epistles*. The scheme of education laid down in the *Republic* for the guardians is taken as a reliable source for determining the programme of the Academy. Professor Burnet seeks to destroy the legend of a feud between Plato and Isocrates, and argues that the chief contemporary influence upon Plato's thought was that of Eukleides and the Megarians. In the later chapters Professor Burnet deals in succession with the period of 'criticism,' represented by the *Theaetetus* and *Parmenides*, Plato's logic (the *Sophist*), his political and educational theories (*Politics*, *Lysis*, the Sicilian enterprise), the 'philosophy of numbers' (Aristotle and the *Philebus*), the 'philosophy of movement' (the *Timaeus*).

From this summary it will be apparent that Professor Burnet finds more Platonic matter in the Platonic dialogues than a reader of the Introduction to his edition of the *Phædo* might have expected. 'The task,' he there said, 'of reconstructing Plato's more mature philosophy from the unsympathetic criticisms of Aristotle is a delicate but not, I believe, an impossible one.' Yet here is an account of Plato's philosophy which gives Aristotle only half a chapter out of six. Professor Burnet says explicitly, 'I do not regard the dialogues of Plato as records of actual conversations, though I think it probable that there are such embedded in them' (§ 116). We are allowed to treat Socrates' tribute to Isocrates in the *Phædrus* as in a sense Plato's (§ 125), and the confessions of Meno and Alcibiades to the irresistible spell of Socrates' personality may be taken 'as evidence of the effect produced by the discourses of Socrates on Plato himself in his youth' (§ 109). Traces of distinctively Platonic doctrine are admitted in the *Phædrus* and in the *Symposium* (§ 168), and much of the later part of the *Republic* ('the good,' for instance) is adulterated with Platonism; much also (the political duties of philosophy, the scheme of education) is pure Plato. Thus a good deal more than half of the Platonic corpus is, after all, accepted as in every sense Platonic.

The story of Plato's life as it emerges from Professor Burnet's hands may be roughly summarized as follows. His earliest memories would be dominated by the figure of Socrates, whom he knew very well, though probably he was never admitted to the inner circle of 'associates.' In the years following Socrates' death he composed in rapid succession, with a purely artistic interest, the early dialogues, intended to perpetuate the figure and conversation of the master. By the time he was forty, when, as we know from *Ep. vii.*, he visited Italy and Sicily for the first time, the so-called Socratic dialogues would be completed, as well as the *Symposium* and *Phædo*; the *Republic* would be 'at least well advanced,' and the *Phædrus* is 'not very much later.' The end of this period of literary activity would coincide roughly with the foundation of the Academy, and what there is of Platonic matter towards its end is due to the influence of that approaching event. Then follows an interval of nearly twenty years during which Plato was busy teaching and developing his own philosophy. He was nearly sixty when he took up his pen once more to dilute for the benefit of a larger public than his lectures could reach his relations to rival schools of philosophy. That is the subject of the *Theætetus* and *Parmenides*. Both dialogues were written when Plato was still dominated by the influence of Ekkleides, but already beginning to revolt against it. Contemporary theories of knowledge (of doubtful authenticity) are discussed in the *Theætetus*, while the object of the *Parmenides* is to show the deficiencies of that Socratic theory of Forms which Plato had himself expounded in the *Phædo* and *Republic*. The criticism follows Eleatic-Megarian lines, and Plato means to represent himself here, as in the *Sophist*, as 'the true successor of Parmenides.' The *Sophist* is considerably later, and when it was written Plato had already broken with Megara. 'Sophist' indeed in this dialogue means Megarian, and the technical definitions of the term have no reference to Gorgias or Protagoras. The philosophic subject of the dialogue is the possibility of significant negation, which the Megarians, under Eleatic influence, had denied. The *Sophist* was closely followed by the *Statesman*, which gives us Plato's political views, less anti-democratic than those of the *Republic*; for Plato was a Whig and did not share the oligarchic sympathies of Socrates. Plato's final essay in politics and education, the *Laws*, was occasioned by the unsuccessful attempt to collaborate with Dionysius of Syracuse. In the *Philæbus* we get a partial statement of Plato's unmythical thought, provoked by controversies within the Academy between Speusippus and Eudoxus on the subject of pleasure. Lastly in the *Timæus* we see Plato playing with Pythagoreanism, constructing a half-serious cosmology with the aid of his theory of Forms. For a cosmology must always be a myth or story, and cannot be science; a purely Platonic cosmology is therefore out of the question.

In all this Professor Burnet exposes a very broad front to criticism. The latter part of the book is full of striking suggestions for the interpretation of the dialogues, each of which deserves a detailed discussion. Sometimes he is unduly elusive, as in the account

of Analysis and Division (§§ 167, 168) which avoids explaining the meaning of the terms altogether. But the total impression produced is such as to silence hasty or fragmentary criticism. These few chapters are undoubtedly a contribution to Platonic study of the very first importance; there is nothing shilly or second-hand about them; and they require for their criticism little less than a re-reading of the text of Plato. And while their value is in a great measure independent of Professor Burnet's main hypothesis, they are yet the most convincing testimony to the soundness of that hypothesis that has as yet appeared. We doubt if anyone who disagreed with the Introduction to the *Phædo* will be able to lay down this book without a feeling that Professor Burnet is a good deal nearer to the truth than he formerly believed.

It will be admitted that there is no extant account of Plato which is free from ill-considered difficulties and contradictions, to which we are only deadened by familiarity. If we look candidly at Professor Burnet's version, making due allowance for very deep-seated prejudice, we shall find—possibly to our surprise—that it is certainly not more difficult or contradictory than the strongest of its rivals. But there is a further deduction to be made. Professor Burnet, for all his twenty years' study (p. 349) of Plato, is a mere tyro at the exposition of his hypothesis compared with the youngest expositors of the other. An army of predecessors has not been at work to strengthen his weak places. He has had to do the work himself, and, brilliantly as he has done it, parts of the defences are bound to be somewhat tentative and provisional. Making due allowance, again, for this fact, we are bound to conclude either that Professor Burnet's personal prowess is incomparably greater than that of his eminent antagonists, or that his position is naturally much stronger than theirs. Which alternative is to be preferred? Much as we respect Professor Burnet, we are inclined to adopt the latter.

J. L. S.

Numenius von Emesa: Quellenforschungen zum Neuplatonismus und seinen Anfängen bei Plotinios. Von W. W. JÄGER. Pp. 143. Berlin: Weidmann, 1914.

Numenius was a Christian Bishop of Emesa in Syria towards the end of the fourth century of our era. He wrote a treatise *εἰς τὴν ἀρίστην διδασκαλίαν*, showing a curious mixture of Pagan and Christian learning, parts of which have come down to us under the name of Gregory of Nyssa. A new edition of this work, we learn from Dr. Jaeger's preface, will shortly be produced by Dr. Burkhard of Vienna. The extracts from Numenius which were included in the third part of Von Arnim's *Stoicorum Veterum Fragmenta* showed plainly that valuable material for the later history of Stoicism and for the relation of Stoicism to other philosophies was to be found in the treatise; and what Dr. Jaeger here attempts is to discover the main sources upon which Numenius relied, and so to enable us to estimate more precisely the importance of his evidence. He does not deal with the whole work, though he thinks that it would repay a thorough analysis, but with a few chapters which seemed to be particularly instructive. The discussion is regarded, as the sub-title explains, as *spade-work* preparatory for the historical account of Neo-platonism that will one day be written. 'With equal justification,' says Dr. Jaeger, 'I might have called my work simply "Enquiries concerning Plotinios." For Plotinios is the true founder of Neo-platonism, and recent researches make it increasingly clear that his eclectic system was by far the most powerful influence operating upon the philosophical and theological speculations of the Roman Empire; indeed, considering the length of its duration and the range of its extension, we may doubt whether his sway over the human mind was not more absolute than that of any philosopher before or since. For though Plato and Aristotle were always greater names, Plotinios was the medium through which they were seen, the accepted interpreter and harmonizer of their doctrines.'

The treatise is divided into two parts, the first headed 'Galen's theory of knowledge and the older Neo-platonism,' the second headed 'Poseidonios Metaphysics (*Weltanschauung*) in Nemesios.' Under the first head Dr. Jaeger deals with the six chapters concerning sensation and the senses and the two chapters concerning sense and memory. For the account of the senses the main source is Galen's lost work in fifteen books, *peri deothesen*, of part of which his surviving *symplosis* of Plato and Hippocrates gives us a compressed version. The inference to the lost work is based on a comparison of Nemesios with the relevant passages in the *symplosis*. The character of Galen's doctrine, a compound of Platonic and Aristotelian matter with a dash of Epicurus thrown in, agreeing in important details with Plotinus, Basilides, and Philo, points to a neo-platonic source. The account of Memory is partly drawn from Galen, but the greater part is frankly neo-platonic and is probably drawn from Porphyry's *peri theiasen phron.* Throughout these chapters the doxography is in varying degrees divergent from Aetios, and Dr. Jaeger thinks that Porphyry at any rate got his information from the school of Poseidonios, which, as Diels has pointed out, formed doxographies of its own. Thus, though no direct path to Poseidonios is found in this part of the enquiry, a good many converging probabilities point in his direction.

In the second part Dr. Jaeger directly faces the question whether the metaphysical doctrines of Nemesios show signs of Poseidonian influence. He begins with the theory of the four elements and their interchanges, and shows a community of tendency between Nemesios and writers as far apart as Galen, Basilides, Chalcidius. The signs of wide doxographical learning and of extensive medical reading, the position accorded to the *Timaeus*, the general combination of Platonic and Aristotelian ideas, together with much detailed evidence, point to a neo-platonic source which must be in the last resort Poseidonios himself. This conclusion is corroborated by an investigation of the notion of 'Syndesmos,' i.e. of that rudimentary evolution-theory which refused to admit any *status naturae* and attempted to break down the apparent disparities of creation by the discovery of intermediates. The idea may be said perhaps to originate with the *Timaeus* of Plato and was certainly not without influence upon Aristotle. This is the most interesting chapter in the book and deserves careful study. It ends with an account of the position of man and civilization—that ancient field of controversy in which late Greek thought sought to combine all the combatants, Democritus, Epicurus, Academic, Peripatetic, Cynic, Stoic, in a lasting peace. Here too the 'Syndesmos' idea has its application; for man is himself the link between heaven and earth, and here the Microcosmic doctrine of Democritus and Poseidonios joins hands with the Bible story of the Creation. In all this the original synthesis was that of Poseidonios, and his intellectual force was so much greater than that of his followers that his ideas still survived and triumphed four or five hundred years after his death, when his name was almost forgotten.

Such are Dr. Jaeger's contentions. They are expounded with the thoroughness and lucidity which is to be expected from him. A sceptical reader may refuse to be convinced; he will easily find loopholes through which doubt may enter; or he may take refuge in the general criticism that such enquiries lead in the end nowhere. Often, indeed, it does seem regrettable that so much learning and acumen is spent on these source-hunting expeditions; and if anything is quite certain it is that nothing of real philosophic importance can be discovered in this way. So that the philosopher is inclined to join the sceptics. Still the sport is difficult and arduous, and it would be churlish to withhold applause and gratitude to those who face its hardships and cheerfully hope that they are contributing to great results. However, we should be glad to welcome Dr. Jaeger back to Aristotle.

Catalogue of the Greek Coins of Palestine (Galilee, Samaria, and Judaea).

By G. F. HILL. Pp. cxvi + 304. With one Map, a Table of the Hebrew Alphabet, and forty-two Plates. Printed by order of the Trustees of the British Museum. London, 1914. £1 10s.

In scope and general plan the latest volume of the *British Museum Catalogue of Greek Coins* is a notable contribution to the series of which it forms a part, while in execution it is entirely worthy of the author's reputation as a scientific numismatist. This is high praise, but the verdict is not likely to be called in question by anyone who is in a position to measure the extent of Mr. Hill's achievement. He was, of course, fortunate in the wealth of the material that lay at his disposal; the acquisition of the Hamburger cabinet has carried the British Museum far ahead of any of its continental rivals, so far as its store of Palestinian pieces is concerned. On the other hand, the difficulties were of a very special kind. The related historical records are less illuminating than might have been expected; the legends are in many cases extraordinarily crumbled and hard to decipher; the types betray hardly a glimmer of artistic merit to relieve the tedious task of accurate classification. At the same time the problems involved are not seldom interesting and important. It is, therefore, most satisfactory to have them dealt with by such competent hands. The book, it must be remembered, is much more than a descriptive account of the contents of the national collection. It is virtually a *corpus* of all known varieties, accompanied by a complete critical apparatus of everything necessary for their proper interpretation. The majority of those who take it up will probably turn first to what Mr. Hill has to say about the 'Maccabean' shekels. They will find that he holds fast to the view—originally propounded by Th. Reinach but afterwards abandoned by its author—that these much-discussed coins were struck during the First Revolt of the Jews against Rome; and they will not fail to be impressed by his analysis of the epigraphic evidence, which has never before been sifted in so systematic a fashion. It is worth noting that since the appearance of the *Catalogue* it has been hinted in the *Revue Numismatique* that during recent excavations in Jerusalem some of these shekels have actually been discovered in association with contemporary Roman denarii. Should this prove to be so, it will be a conclusive vindication of the soundness of Mr. Hill's position. Though this is the *questio vexatissima* of Palestinian numismatics, there are others hardly less controversial. They are too technical for detailed reference in a brief notice of this kind, and it must suffice to say that all alike are here treated with fullness of knowledge and unflinching sobriety of judgment. Special mention may be made of the passages in the Introduction which touch upon the cults of Gaza and upon the unique silver coin with the image and superscription of Yahweh. A wise liberality has been exercised in the provision of forty-two colotype plates, and the indexes are admirable.

Tabulae in Usum Scholarum. Editae sub cura IOHANNIS LIETZMANN. ROTTERDAMI: A. Marcus et E. Weber. Oxoniae: Apud Parker et Filium.

1. **Specimina Codicum Graecorum Vaticanorum.** Collegierunt PIERRE FÉRON et DE CAVALIERI et IOHANNES LIETZMANN. Pp. xvi. 50 Plates. 1910. 6 M. or 12 M.
2. **Specimina Codicum Latinorum Vaticanorum.** Collegierunt FRANCISCUS EMILE S. J. et PAULUS LIEBART. Pp. xxvi. 50 Plates. 1912. 6 M. or 12 M.
3. **Specimina Codicum Orientalium.** Collegit EUGENIUS TISSERANT. Pp. xlvii. 20 Plates. 1914. 20 M.

The volumes of this excellent series will be heartily welcomed alike by students and teachers, and can without exaggeration be described as marvels of cheapness. The first of the three here to be noticed contains fifty photographic facsimiles, almost all of them remarkably clear in spite of the reduction in size sometimes necessary, of Greek MSS. in the Vatican. A more fully representative selection might no doubt have been got

had other libraries been drawn on as well, but as rich are the treasures of the Vatican that the editors contrive to find specimens of nearly all the main types of script found in Greek vellum MSS. Uncials are represented by seven well chosen plates, including of course facsimiles of the Codex Vaticanus and the Codex Bezae Cantabrigiae. Plate 3 is a specimen of the curious minuscule script which represents an earlier attempt than the fully developed minuscule of the ninth century to adapt the current cursive to library use (Thompson, *Palaeography*, 1912, p. 218). The ordinary minuscule is represented by a series of specimens ranging from the year 897 to the year 1565; and many different types, the stiff early script, the conservative liturgical hand, the sloping literary hand, the much abbreviated hand used in books intended specially for students, and the calligraphic hands of the fifteenth and sixteenth centuries, are represented. The editors have rightly chosen, as far as possible, dated MSS.; and they are equally to be commended for noting, in the brief descriptions at the beginning of the volume, the provenances of the MSS. when it is known. It is interesting to compare with the Eastern MSS. a certain number written in the West, such as are shown in Plates 16 (Calabria), 17 (Capua), 22 (Sicily), 31 (Otranto), 38 (Lower Italy). For purposes of private study it would have added to the usefulness of the volume had the descriptions contained more commentary of a definitely palaeographical kind, calling the student's attention to the characteristics of the various hands illustrated. It is very difficult for the beginner (for whom no doubt these volumes will be specially useful) to note essential as opposed to unessential points of difference between the hand of one MS. and that of another without such assistance.

The other two volumes do not fall strictly within the scope of this *Journal*. The Latin volume contains fifty plates, also well selected, with a brief palaeographical summary. The eighty plates of the Oriental volume are divided between the various languages as follows: Samaritan 2, Hebrew 17, Syriac 18, Palaestinian 2, Mandaeic 1, Arabic 21, Aethiopic 5, Coptic 13, with 1 polyglot MS.; but many plates give specimens of two or more MSS.

The Primitive Text of the Gospels and Acts. By ALBERT C. CLARK, *Corpus Professor of Latin*. Pp. viii + 112. Oxford: at the Clarendon Press, 1914. 8vo. 4s. net.

Whatever may be the ultimate judgment of Biblical scholars on the thesis advanced by Prof. Clark, there can be no question that this book is of an importance quite out of proportion to its size, and that the arguments contained in it will have to be taken into consideration by future critics of the New Testament text. Prof. Clark's thesis is, briefly, that the 'Western,' and not the 'Eastern,' the longer, and not the shorter, text of the Gospels and Acts is the primitive one; that the process which has led to the wide divergences between MSS. is one not of interpolation but of omission; that B and N, which hitherto it has been an article of faith with modern critics to regard as the final authority on disputed points, are of inferior authority to D and the ancient versions. He is, of course, not the first to suggest such a view; the novelty and importance of his book lie in his line of argument rather than in his conclusion. So long as the point at issue was discussed only on abstract and general grounds, a book more or less on one side or the other, though it might help materially towards a general agreement, was not likely to be final; but if Prof. Clark's thesis is sound we seem in a fair way to getting a mathematical demonstration of the case for the 'Western' text. This thesis is now derived from his studies on the text of Cicero, with which, rather than with speculations on the New Testament, most readers will associate his name. These Ciceronian studies have convinced him that the maxim *brevis est lectio potior* is a false one; and in his preliminary chapter he quotes numerous instances, most of which admit of not the slightest doubt, of the omission in MSS. of one or more lines of their archetype. Now

Prof. Clark noticed that short passages omitted by one MS. (or group of MSS.) or another very often contain approximately the same number of letters; and when longer omitted passages are examined they are found to contain multiples of this number. In this way it is frequently possible to determine the average number of letters per line of a particular lost archetype; and if a disputed passage omitted in MSS. known to be derived, directly or indirectly, from that archetype is found to contain the line-number or any multiple of it, this fact raises a presumption that it is a genuine portion of the text, omitted by the skipping of a line or several lines, or even, in some cases, of a column. Having found that this method yields satisfactory results in the case of Cicero, Prof. Clark resolved to apply it, as an experiment, elsewhere; and the present volume records his observations in the case of the Gospels and Acts, upon which he began with no bias in favour of the 'Western' text and indeed unprepared to question the soundness of the prevailing view. He examines in turn some of the most famous Greek MSS. as well as several of the ancient versions; and finding that a very large number of disputed passages contain approximately the same number of letters or a multiple of it, he concludes that the longer 'Western' rather than the shorter 'Eastern' text represents the primitive form of the narrative, the latter being due to a recession by editors suspicious of interpolations and ignorant of the laws which guide the modern textual critic. He believes that the main line of transmission in the case of the Gospels was through MSS. written in narrow columns, but that the Acts were transmitted through MSS. arranged in *arxes*.

The present reviewer is hardly prepared to pronounce definitely as to the soundness of Prof. Clark's theory. It must, of course, be judged in connexion with other lines of argument, which do not fall within the scope of the volume under review; and besides these extraneous considerations there are certain objections which must be borne in mind. The case of Cicero is in this respect different from that of the New Testament, that doctrinal motives make interpolation inherently more likely in the latter. Again, the theory of omission presupposes—in view of the large number of disputed passages—great carelessness on the part of scribes; and although students of MSS. will not count that a strong objection it may be held to have some weight. There is, too, a danger, when we start with a theory of this kind, that we may force the evidence a little, either by allowing too great a variation in the line-length (e.g. counting all cases of 7 or 13 letters as falling under an average length of 10) or by attaching too little weight to instances which cannot be reconciled with the average length; and we have, too, to make allowance for mere coincidence. Finally, it must be remembered that the line-length is not always the same in the same MS.—for example, the British Museum papyrus of *Isaïas De Pace* is written in narrow columns at the beginning, but as it proceeds the hand grows more compressed and the columns broader, so that the line-length steadily increases. Nevertheless, Prof. Clark's argument is an exceedingly strong one, and he has made out so good a case that supporters of the ruling theory will have to examine it very carefully and to bring forward equally strong arguments on the other side if they are to regard their own position as secure.

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BRONZE STATUETTE OF ANISTIPPUS



ARISTIPPUS. HEAD OF BRONZE STATUETTE





ARISTIPPUS: MARBLE HEAD IN FLORENCE

ARNDT-BRECKMANN. *Griechische u. römische Profälle.*





B



A

STATUETTE IN THE VATICAN



A



B

STATUETTE IN MUSEO BARRACCO



Ambrion

STATUE IN PALAZZO SPADA

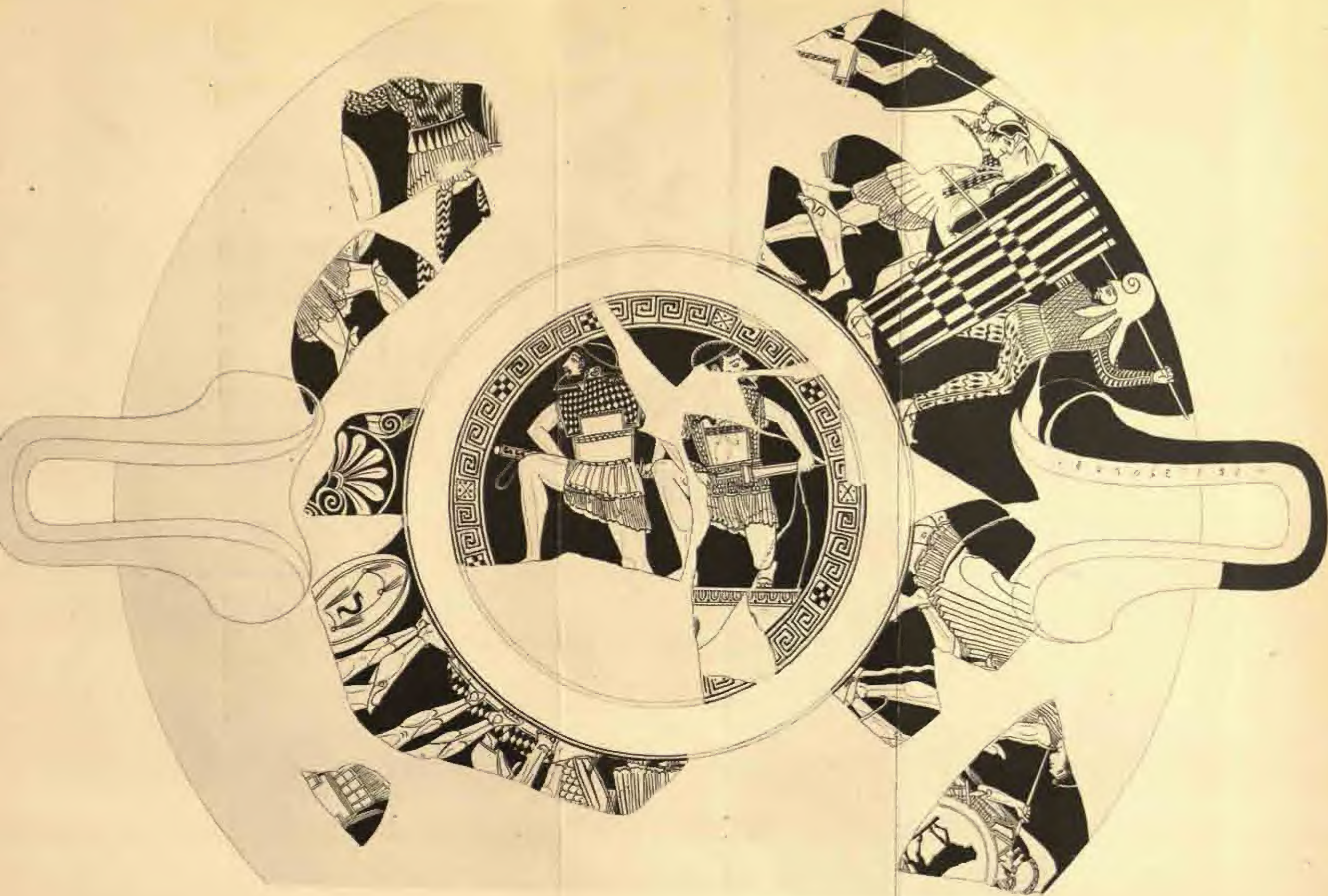


THANATOS



HERMES

HEADS FROM THE HERMES DRUM



KYLIX SIGNED BY BRYGOS



SURGICAL INSTRUMENTS FROM KOLOPHON



SURGICAL INSTRUMENTS FROM KOLOPHON





SURGICAL INSTRUMENTS FROM KOLOPHON





LEKYTHOS IN BRUSSELS (A 1379).





TWO LEKYTHOI IN ATHENS (12480 1039).



STAMNOS IN THE BRITISH MUSEUM (E 448), A.





GEMS AND COINS ILLUSTRATING THE DEVELOPMENT OF THE PLOUGH





BRONZE GROUP FROM AREZZO



I.



II.

BRONZE MODEL PLOUGH FROM COLOGNE

I.—FROM SIDE

II.—FROM BENEATH

MAINZ



III.—BRONZE MODEL PLOUGH FROM TALAMONE

FLORENCE

11

56) 2m

1



22

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